

**The Ramakrishna Mission
Institute of Culture Library**

Presented by

Dr. Baridbaran Mukerji

RNICL-8

2

14208

MEMOIR
OF THE
CODUGU SURVEY.

COMMONLY WRITTEN

KOORG.

PART II.



BY

LIEUTENANT CONNOR,
SURVEYOR.

BANGALORE:

CENTRAL JAIL PRESS.

1870.

R.V. 1971

954.85

COH



INDEX.
TO THE
CODUGU MEMOIR.

PART THE 1st

	PAGE
Introduction,	1
Situation—Boundaries,	1
Remarks on the Boundary,	2
Extent and Area,	3
Table exhibiting the Area of Codugu together with that of its interior Divisions,	5
Capacity,	7
Estimate of the hilly and plain cultivated and uncultivated land,	8
Reference to the surrounding countries,	9
Aspect,—Mountains,	11
General observations as to the Superficies and Configuration,	13
Map of the interior Divisions,	14
Divisions and their Boundaries,	14
Principal Places Cusbas, Market Towns, &c—Condleypett,	17
Sunnywar Suntay—Ramapoora or Ramasamy Cunniawey,	17
Seamwarpett—Muddukayray,	18
Veerajenderpett,	19
Bagamundla—Kiggut Naad—Palaces,	20
Remarkable places below the Ghauts—Poottoor,	21
Forts Droogs &c—Fort of Muddukayray	21
Cuddungs or Breast works,	24
Defences of the Roads,	25
Villages and Towns,	25
Waters &c,	26
Rivers &c, Cauvery	27 & 28
Soornawutty	30
Dood Holay or Luchmun Tiritt—Burrapolly,	31
Hemmawutty—Rivers below the ghauts—The Pruswanni river,	32
Coomardarry—Irruday Holay,	33 & 34
Lakes, Tanks, Reservoirs, &c.—Forest, Woods, Jungle &c,	35

	PAGE
Agrarams of Bramins, Polliams, &c.,	42
Jaghiers—Punneya's of Rayal Farms,	}
Cattle, Animals, &c.,	44
Kine,	45
Buffaloes—wild Animals,	46 & 47
Tigers—Bears,	48
Kautee or wild Buffaloe—Kaymay,	49
Kennai or wild Dog,	50
Remarkable Buildings—Mahdeopoor Mattam,	52
Mausoleum at Muddukayray—Palace,	53
Mines, Minerals, Manufactures,	54
Manufactures—Soil of the high grounds in Codugu proper,	55
Of the large Hills,	}
Of the high grounds in Yailsowra—The western face of the	
ghauts	
Soil of the valleys in Codugu proper—In Yailsowra	56
and Nunjarajputtun,	}
Soil below the ghaunts—Of the high grounds—Of the valleys,	57
Crops above the ghaunts—In Yailsowra—Crops below the	58
ghants—Return in fold,	}
Productions of Codugu proper—Of Yailsowra & Nunjarajputtun,	59
Of the forests—Below the ghaunts—Agriculture,	60 & 61
Of the Upper Country—Lands—Ploughing,	62
Manure—Species of Rice—Sowing,	63
Naty or Transplantation—Weeding,	64
Harvest—Cultivation of Yailsowra—Of Nunjarajputtun,	65
Cultivation below the ghaunts—Lands,	66
Manure—Sowing—Weeding	67
Crops—Harvest—Coomaray cultivation—Hill Rice,	68
Raggy—Arreca Plantations—Character of the cultivation,	69
Obstacles, &c.,	}
Agricultural Instruments,	72
The plough of Codugu proper,	}
Register of the Villages,	73
General view and description of the Boundary,	95
Appendix,	115
Series of Triangles,	116
Table shewing the distances of the several Points from the	
Meridian of Babroyen Droog and its perpendicular,	137

INTRODUCTION.

The following Memoir it is hoped, will serve to illustrate in some measure, the leading particulars connected with the Map of Codugu and may, perhaps, be found to answer most of the questions that would suggest themselves, as to the situation, physical construction, surface, extent &c. of this little principality. In the Miscellaneous observations that are annexed, an attempt is made to convey some idea of its Government, population, resources, &c. The remarks made on those subjects may it is probable, be considered as unequal to the interest they excite, or the comparative importance attached to them, and the meagre notices given, would doubtless justify the objection, but, it is hoped, not countenance the conclusion, that such was attributable to carelessness or indifference; however ready I may be to acknowledge the imperfect, perhaps trifling nature of the information conveyed, I must deprecate the suspicion of its originating from such a cause. Indeed if apologies were necessary for the loose, and unconnected sketch I have ventured to give, there are not wanting circumstances, that might be offered in extenuation.

The Survey of Codugu having in every instance been conducted after the manner observed with regard to that of Soonda, no particular account of the method pursued in carrying it on will now be required.

The duties of the establishment, with reference to the above-mentioned district being completed on the 31st October 1815, it was placed under my directions and ordered to proceed to Codugu for the purpose of surveying that Principality. Some delay necessarily occurred in arranging for this undertaking; the Survey however, was finally completed on the 31st of October 1817, thus rendering the whole time consumed in its execution precisely two years, a period it is hoped that will not be deemed as having been protracted to a greater length than was consistent with due accuracy, and what was absolutely necessary, from the difficult nature of the country.

MEMOIR OF THE CODUGU SURVEY.

Situation. In speaking of the situation, aspect and physical construction of this territory, it may be desirable to describe it under two heads, first that of Codugu proper embracing in a general sense the whole of the country above the ghauts, and secondly, that consisting of the districts lying beneath this ridge, those combined portions forming the principality. Codugu proper is situated on the summit, though occupying but a small portion of that range of mountains which formed the boundary of ancient Kerala.* The western ghauts are here elevated about 5000 feet above the level of the sea, and covered everywhere with almost impervious woods, present to the westward a steep and precipitous surface, towards the east, however, they have a gentler declivity; Muddukayray the capital of this mountainous principality, lies 63½ miles almost due west of Seringapatam (it being only 51° north of that place.) It is situated in the midst of the hills and is in latitude 12° 26' 20", longitude 4° 30' 46". The possessions of this state above the ghauts, stretch on the north and west, to the champaign country of Mysore, and on the south to the confines of the hilly district of Wynnaad; that portion of the country lying below the ghauts, is of confined breadth, but extends at its most western point, to within a few miles of the sea, embracing within its limits a small portion of Malliallum and Tullava.† The extreme limits of the territory lie between 11° 55' 23" and 12° 49'

* Kerala the ancient name of the Western tract which comprises the modern countries of Malabar, Travancore and Canara. Konken is the northern extension of this low country.

† The Purwunnie river falling into the sea at Chandergerry formed the ancient boundary of those two provinces now known under the modern names of Malabar and Canara, the division between which is the Peyunguddy river whose stream separates the two Collectorates.

33° north latitude; and $4^{\circ} 8' 23''$ and $5^{\circ} 14' 10''$ longitude west from Madras observatory.

Boundaries. Codugu is bounded on the north, partly by the talook of Buntwalla in Canara, and is separated from it by the Nettrawutti and Coomardarry rivers which for the extent of 34 miles constitute its frontier. On the eastern part of this northern boundary by the district of Bullum or Munzeerabad and is there partly defined by the Hemmawutty river. On the east by the talooks of Konoer, Arculgole and Bettadipoor of Mysore. The Cauvary for a considerable distance (near 20 miles) marking the division. On the S. E. by the Talook of Heeggadevencotta; and on the south by the district of Wynnaad, the line of demarcation passing over the summit of the Brumagerry hills. On the west it is bounded partly by the district of Tellicherry in the Province of North Malabar—the range of western ghauts separating the two countries for the space of nearly 65 miles, quitting them however, the line of division takes a direction towards the sea, when having approached the town of Coombla, it recedes for a short distance, after which turning towards the north it forms a junction with the Nettrawutte river, at the north-western extremity of the country being bounded for the last 80 miles by the talook of Beakull belonging to North Canara.

A momentary glance at the map of Codugu

Remarks on the will shew the great irregularity of its figure; boundary. and the comparative smallness of its contents in proportion to the extent of its boundary it is encompassed on the west, south, and part of the north, by the British possessions which extend along its limits for $229\frac{1}{2}$ miles (13 of which are occupied by Wynnaad and the remainder by Canara and Mulliallum). The territory of Mysore runs along the eastern frontier for 139 miles thus making the whole perimeter equal to $368\frac{1}{2}$ miles, an extent of boundary greatly disproportionate to its area. The upper country with the exception of Yailsewra talook is generally defined by natural limits. The ghauts on the south west, and the stupendous ridge of the Brumagerry mountains on the south, present the most distinct boundaries; quitting this chain, the eastern frontier is marked by an immense forest, except where the Cauvary forms the line of separation; approaching the northward, this woody belt gives place to the open

[slopes of Yailsowra, whose limits are defined by a factitious boundary.*

The Districts below the ghauts divided by so great a barrier from the country on their summit, naturally form a portion of Malabar and Canara which they nearly intersect, and to which indeed they formerly belonged; it will be seen that their limits with the exception of the northern line are quite artificial, the boundary being in scarcely any place defined by objects forming a natural barrier.†

Extent and area. Codugu is of a very irregular outline; could its form be reducible to any determinate figure, it would be to that of a triangle having its apex at the extreme western point. Its length from north to south is 61 miles and from east to west 6.33 miles—those dimensions however continue but for a very short space.

The original possessions of this principality were confined in all probability in the first instance, within the precincts of the most hilly parts, the circumstances which led to an enlargement of those contracted limits, will be found detailed in the slight historical sketch that is given. It may however be observed that Sooleeyn was acquired by purchase; Umr was the gift of the Bednore Rajah to one of the Codugu Chiefs; Punjay and Bullaree were acquired from Hyder partly at the purchase of peace with those mountaineers, and partly as the compromise for certain violated engagements, and Yailsowra was obtained by conquest. Its extent was comprised within those limits till the year 1804 when the British Government, with its usual liberality, in consideration of the singular fidelity and eminent services of the late chief, ceded to him, the talook of Poottoor, now forming one of the most valuable portions of the country. The present extent of this principality is doubtless greater than it ever could have been at any previous period; it comprises an area of

* The boundary is known with the greatest exactness and preserved with the utmost solicitude, a small path runs along it for nearly the whole circuit. Guards are placed at short intervals for the particular purpose of preventing intrusion.

† *Vide* detailed account of the boundary in the Appendix.

2165; square miles, of this space the lower districts occupy 580-2-2; those above the ghauts 1585-1-5;. Calculating however, from the immediate summits of the ghauts the division will be thus, above, 1266-1-14; below, 899-1-9. The accompanying table will be found to exhibit every information with regard to the area occupied by the interior divisions of the country.

CODUGU SURVEY.

5

TABLE SHewing the area of Codugu together with that of its interior Divisions

The nearly-thirty divisions or Naad which may particularly be denominated Codugu proper		Miles			Parts of a mile			Miles	Parts of a Mile			
		1	2	3	4	5	6		7	8	9	
	Yallaun Talook											
Coadley Hobley Naad ..		8	2	7 $\frac{1}{2}$								
Coodcoolee	do	18	3	6								
Hoolasood	do	5	2	10 $\frac{1}{2}$								
Bombulleer	do	3	1	12								
Balla	do	12	1	9 $\frac{1}{2}$								
Connagael	do	3	1	7 $\frac{1}{2}$								
Hamegoon	do	5	0	31								
Doodhully Gowdhully do		7	3	8 $\frac{1}{2}$								
Nirrootoda	do	5	1	2 $\frac{1}{2}$								
Menesedda	do	5	1	9 $\frac{1}{2}$								
Mooloor	do	7	2	4 $\frac{1}{2}$								
Gunagoor	do	12	1	4 $\frac{1}{2}$								
Nunjarpjetton Naad		68	1	18 $\frac{1}{2}$								
Yeddoor	do	94	1	2								
Yedday	do	68	2	18 $\frac{1}{2}$								
Oolagollee Moodagareedo		32	2	12								
Hoarour Noorukkul do		90	2	4 $\frac{1}{2}$								
Koorlaby Moothor do		65	0	11 $\frac{1}{2}$								
Hahlayray Buddugayny do		20	0	34								
Muddukayray Horoomulay do		20	0	34								
Pudy Naku Naad		142	1	1								
Kuddlettlu	do	61	1	10 $\frac{1}{2}$								
Hoodoogayray Moon-dupum	do	36	2	11 $\frac{1}{2}$								
Bayngu Naad		42	0	18 $\frac{1}{2}$								
Byre	do	41	1	11 $\frac{1}{2}$								
Yedday	do	10	1	9 $\frac{1}{2}$								
Hirwoda	do	8	0	2								
Balthealley	do	22	1	8 $\frac{1}{2}$								
Ammathu Naad	do	77	0	12								
Bayppu	do	41	2	2 $\frac{1}{2}$								
Kodyengayray	do	20	1	6 $\frac{1}{2}$								
Kaggoedloo	do	60	0	42								
Bettish	do	89	0	5								
Kaanthamoor	do	14	1	12 $\frac{1}{2}$								
Thawa	do	130	3	4								
					Total of Codugu proper							
								1180	0	7		

Note.—The insulated portion of the Company's territories coming within the Codugu limits is of course not included in the area of the Principality, this portion amounts to 8-8-15. This added to what has already been stated as the extent of Codugu will give 2174-8-6 $\frac{1}{2}$ square miles as the area of territory circumscribed by the Codugu boundary.

MEMOIR OF THE

Capacity. With so large a portion overgrown with forests extremely hilly, and a surface having everywhere such inequalities of level, as in no place to present any thing resembling a plain, the capabilities of this principality as it now offers itself to observation, would be concluded as more circumscribed than even its narrow limits would lead it to be supposed. The natural capacity of the country however is very great, and only requires a more enlarged population to call it forth; forests of a gigantic growth and everywhere a vigorous and florid vegetation, indicate fully its productive powers, and the general figure of the hills, covered with a rich and deep earth, render them almost everywhere capable of being cultivated; they have room and soil sufficient for maturing vegetable productions, and promise fully to repay the labor and expense of husbandry, while its fertile valleys yield in the same extent of surface in the proportion of more than double the quantity of the neighbouring districts. Water, so necessary for all the purposes of agriculture, is obtained in abundance, the nature of the country ensuring it a profuse supply, such a character is however, only immediately applicable to Codugu proper; Yailisowra and Nunjarajputtin have all the aridity of the open plains of Mysore and something of their comparative sterility.

In the districts below the ghauts, the soil of the cultivated lands is more superficial and less productive, and of that of the upper grounds is almost barren, a large portion consisting of all the indurated stone, common throughout the western coast; where more favorable they are covered by but a thin stratum of clay; the valleys in part of those districts however are tolerably fertile, and throughout Soolecay and Punjee are adapted to the cultivation of the Areca tree; steep, narrow, sheltered alike from the extremes of heat and cold, and always retaining a considerable moisture, they possess all the necessaries requisite for the success of those valuable plantations.

Estimate of the hilly and plain cultivated and uncultivated lands.

A reference to the accompanying table will convey a tolerable correct idea of the quantity of land under cultivation in each particular district.

TABLE shewing generally the proportion of cultivated lands.

			Culti- vated.	Unculti- vated.	REMARKS.
			Square miles. 16ths	Parts of a mile 16ths	
Codugu proper.	Yailsowra Talook		14	6 $\frac{1}{2}$	This table has been obtained by the measurement on the plan of the space represented cultivated and may be considered as near the truth as such a mode is capable of.
	Nunjarajputtun	Naad.	1	4	
	Yeddoor	do.	7	7 $\frac{1}{2}$	
	Gudilay	do.	3	14 $\frac{1}{2}$	
	Oolagoolee Moodagayray	do.	2	8 $\frac{1}{2}$	
	Hoaroor Nooruckkul	do.	2	14 $\frac{1}{2}$	
	Soorlahy Moothoo	do.	1	4 $\frac{1}{2}$	
	Hahlayray Buddugayray	do.	1	10	
	Muddukayray Horomullay	do.	1	10	
	Paudy Naku	do.	8	4 $\frac{1}{2}$	
	Kuddieth	do.	5	5 $\frac{1}{2}$	
	Hoodoogayray Moondupum	do.	3	2 $\frac{1}{2}$	
	Bayngu Naad	do.	4	5	
	Byru	do.	3	0 $\frac{1}{2}$	
	Yedday	do.	2	11 $\frac{1}{2}$	
	Hirrooa	do.	2	1 $\frac{1}{2}$	
	Baitthoolley	do.	1	8 $\frac{1}{2}$	
	Ammuttha	do.	7	11 $\frac{1}{2}$	
	Bayppu	do.	6	9 $\frac{1}{2}$	
Umr	Hooyeangayray	do.	5	13 $\frac{1}{2}$	A reference to the table exhibiting the area of the interior divisions will enable the portion cultivated in each immediately to be ascertained. The total as here given shews the country under cultivation to be in proportion of about one 11-56-100ths of the whole country.
	Keygoadloo	do.	3	6	
	Bettieh	do.	6	8 $\frac{1}{2}$	
	Kaunthamoor.	do.	2	8 $\frac{1}{2}$	
	Thawa	do.	5	2 $\frac{1}{2}$	
			Total.....	90	13 12 9
			Kiggutt Naad Talook	19	6 $\frac{1}{2}$ 22 11 $\frac{1}{2}$
# Sooleeay	Umr			7	5 $\frac{1}{2}$
				14	1 $\frac{1}{2}$
			Total of Umr Sooleeay.....	21	6 $\frac{1}{2}$
			Punjee	6	4 $\frac{1}{2}$
			Bullaree	13	7 $\frac{1}{2}$
			Poottoor	11	0 $\frac{1}{2}$
			Nettunukay	14	13
			Sum Total.....	187	10 $\frac{1}{2}$ 35 4 $\frac{1}{2}$

* This includes whatever portion may be under Areca plantation.

It will be seen from the preceding that, on a general average, not more than one $11\frac{1}{2}$ of the whole area is rendered subservient to the wants of man; this very limited proportion is in a great measure accounted for by the rugged nature of the country, the space capable of cultivation could however be still greatly enlarged, as a very great share of that extent, now covered with forest in point of level and soil is calculated for it, and at the lowest calculation $\frac{1}{2}$ of the whole is fit for the plough, this of course will be understood as referring to the cultivation of dry grains, that of rice is capable of being increased, but, in a much smaller degree—the extent of waste land is only great in the Kiggutt Naad talook, and but only a portion of it is capable of cultivation.*

It has already been said that, throughout the whole country there is no space, however small, sufficiently level to be characterized as a plain. Indeed Codugu is one series of hills, varying only in point of elevation, it will not be necessary to particularize the area of each range; the fall of the ghauts alone may deserve a specific mention, calculating from their summits till they melt into the lower hills of the districts situated at their foot, the declivity of that portion of the ghauts coming within this territory, occupies a space of 2613 3-5th square miles, the whole of which is a steep precipitous descent clothed with a majestic forest.

Like the hills, wood is too much the character of this country to require a statement of the area that may be particularly occupied by it, indeed there are but few places that can be called at all open. Yailsowra is the only exception.

Reference to the surrounding countries of Mysore, the countries surrounding Codugu are too well known, to require here anything but a brief mention as to the reference and connection which they may bear to it. Codugu broken by hills, covered with woods, having but indifferent roads, and no large towns, holds out but few temptations to an extensive intercourse with its neighbours, the

* Much of the space represented as waste may at one time have been cultivated; but from long disuse, has degenerated into swamps which cannot be rendered arable.

superior advantages it enjoys for the production of rice renders it however in some measure the granary of the countries in its vicinity. The fertility of the soil, and the habits of the people enable them fully to administer to the wants of their neighbours in this particular.

The geographic position of this principality renders it an object of importance in a military point of view, whether considered as bordering on the confines of Mysore and in the immediate vicinity of the capital of that state, or regarded with reference to that part of Malabar and Canara, which it approaches in point of locality.

Aspect. The aspect of Codugu presents an entire forest, the long and narrow cultivated valleys enclosed within it, serves but to render those vast woods more striking; the whole of the eastern boundary presents a remarkable geographic line of demarcation, exhibiting an almost uninterrupted and impervious wood from the Burmagerry hills, till to reaching the Cauvery; this space is wholly uninhabited. advancing westwards the woods decrease in density as the country improves in cultivation, and becomes gradually thinner till reaching the western ghauts, the immediate summits of which, partially bare of wood, are clothed with a luxuriant herbage. South from Veerajenderpett, those jungles become less impenetrable, and the whole of Kiggutt Naad (with the exception of the eastern boundary) including the Burmagerry Hills is comparatively open, at least when contrasted with the deep forests of the contiguous district. Approaching towards the north, the thick umbrageous woods of the central parts give way to the date, sandal, and other trees, and shrubs of a more meagre soil, leaving Yailsowra an almost perfectly champaign tract.

But a small portion of the summits of the ghauts is free from jungle; their western face presents a continued forest of immense stature partially subsiding at some distance from their base. Wood however is the unvaried feature of these regions. The lower districts of Unr and Sooleay are overgrown with it, quitting them however and advancing towards the sea it gradually decreases, Bullaree and Pungee being generally clad with a more thin and scanty garb, still further approaching westward it entirely gives way to the cultivated valleys and barren rocky slopes of the greater part of Poottoor.

Mountains. The western ghauts, running nearly from north to south, divides this Territory into two unequal portions differing in many essential particulars; the general configuration of both however is abrupt and broken, the most prominent ridge of mountains, as to height and extent, is that forming the summits of the ghauts. This chain is unequal in its elevation, and somewhat irregular in its direction, having a large curvature immediately at the head of the Thorikahna ghaut, the ridge however experiences but little interruption in the course of 50 miles, running from Subramuhni on the north to the Brumagerry hills on the south; towards the west it falls with great steepness, the descent from the summit to the foot being generally from $2\frac{1}{2}$ to 3 miles, the first part of which is particularly rapid; to the east this chain has in many places a precipitous descent, and is generally steep, the declivity extending however, but for a comparatively short distance, its length bearing no comparison with that of the western face; innumerable ridges branch off from this range, but all diminutive in proportion to the parent from which they spring, they decrease in height as they recede from this ridge, but have everywhere narrow summits, and steep declivities. Todiandamaël, situated $13\frac{1}{2}$ miles almost directly west of the Pettah, detaches itself in a picturesque manner from this colossal range, and raises its pointed summit above all others; this beautiful hill the most elevated in this part of the ghauts, can only be viewed with effect at some distance beneath its base, its measurement is 5682 feet above the level of the sea. Soobramuhni part of the same ridge, and situated on the northern confines of Codugu, and partly separating it from Mysore, has nearly similar claims to pre-eminence, it being only 99 feet lower; the height of these two points will convey some idea of the elevation of this chain, which on an average is in scarcely any place more than from 4 to 800 feet below them.

The Brumagerry range of hills, running in a direction from east to west, and situated on the southern limits, constituting a formidable natural barrier between Codugu and Wynaad is the next in importance; its general height may be about 4500 feet above the level of the sea, it consists of a table land from the elevated plain of which detached summits rise. Davashi betta is the highest of those, being only however from 100 to 150 feet more elevated

than the other peaks. The northern face of this range has a steeper ascent and of greater length than that looking towards the southward, giving to Wynaad the appearance of having a higher general level than Codugu. Davashi betta is a place of pious celebrity and has been the residence of Suneeashees for time immemorial; numerous devotees resort to the small spring at its foot from which issues the Letchinun Tirut, and a journey to Davashi betta is supposed to add efficacy to this pilgrimage.

Of the inior ridges, that supporting the table land upon which Muddukayray lies is the most conspicuous. Noorkull naad rising on the south eastern extremity of this chain is the highest point of it, those ranges branching off from the stupendous mountain of Soobramuhni are next in consideration, running from that hill they pass a long northern boundary for a considerable distance and are high and steep.

Numberless insulated hills giving way to steep slopes chequer the surface of the country; of those, Cotay Bitta is the most remarkable, this immense mountain lies 9 miles nearly north of Muddukayray its elevation is not greatly below that of the range of ghauts, and its base occupies an immense extent of country, the summit of this hill is comparatively flat forming a kind of waving table land, its sides alone are clothed with forest, and innumerable cultivated valleys occupy the recesses in them; almost immediately on the top of Cotay Betta there is a fine reservoir of water which, in every season retains a constant supply, close to it is a rudo temple dedicated to some of the numerous deities that share the homage of those mountains. Maullimby Peak lying on the confines of Yailsowra and Yeddoon naad is the next in point of elevation it is however more remarkable for the beauty of its figure which represents an exact cone, than for its height. Other detached hills and ridges, tho' numerous are not deserving of any particular notice. The hill close to Veernjenderpett and Moogoatggrayray betta are the most remarkable; they are both steep, but low, the latter presents a precipitous rocky acclivity towards the west; there is a small Pagoda on its top; some few detached ranges are situated along the eastern boundary not however remarkable for either elevation, or extent; amongst them Seedaswar and Mawcull are the

most prominent, the former guards the pass, or rather woody defile that gives entrance to Codugu, and attracts attention, as being for some years the place of retreat of the adventurous chiefs of those wild regions. A Pagoda dedicated to Siva occupies the top of this hill

Of the mountains below the ghauts, the immense ridges connected with, and branching from them, form the principal ones. In the lower districts those chains descend with great steepness leaving a large space along the foot of the ghauts, one unvaried extent of precipitous hills, and impenetrable woods. The range lying on the southern boundary stretching from Tulla Cauvery to Puruthuddy betta is the most remarkable, presenting an uninterrupted ridge for the whole distance, having numerous minor branches running from it; of the few detached hills Buntapale, Kunneeyar Goota and Bulla naad are the most conspicuous, the former is the highest; they are however all comparatively low but very steep.

From the above enumeration of the most

General observations as to the surfaces and configuration. prominent mountains, the general character of the superficies, and configuration of the country will be inferred; covered with chains of hills of

equally various elevation as direction, its aspect is greatly diversified; but its general, and almost invariable features are ruggedness. The whole of the western portion of the upper country lying in the vicinity of the range of ghauts is abrupt, and mountainous: quitting this Alpine tract, and approaching the eastward, the various ramifications of those hills, loose themselves in the steep low ridges which insensibly subside in the undulating slopes of the most eastern parts, the aspect of Yailsowra is of this waving nature, and though not immediately flat, has a much larger portion of plain than any other part of the country. Descending the ghauts, whose mountainous wall gives the upper country the appearance of an immense terrace; we find the superficies of the lower districts equally marked by those rugged asperities, that distinguish the more elevated tract; quitting those lofty ridges that descend from the range of ghauts, the higher acclivities give way to eminences of lesser magnitude which gradually sink into steep but low slopes infinitely varied as to shape, and extent, those again are lost in the gentle un-

dulating rocky table of which the more western parts are formed.

The rough and uneven surface of the country is everywhere diversified by narrow and steep valleys, which are occupied by the arable lands, this situation being the only one calculated for the cultivation of rice. The breadth of those valleys, varies in proportion to the steepness of the country, they rarely however exceed half a mile, and in the more hilly parts, frequently are not more than a fourth of that distance; winding along the bases of the eminences that border them, they run for considerable distances, occupying the narrow cliffs of all the high grounds affording sufficient water for the purposes of irrigation; the narrow valleys are cut away to increase the extent, and if favorable are formed into terraces for the purpose of further enlarging the space capable of being cultivated.

The general principle upon which the country of Codugu is divided, differs but in few particulars, some of the terms excepted, from the other mountainous countries occupying the sunmits of the western ghauta, and those situated below this range of hills. The talook of Yailsowra and the small district of Nunjarajputtun form an exception to this observation, resembling both in superficies and productions the open country of Mysore, their divisions are arranged after the manner common to those of that country.

The accompanying map, exhibits every particular regarding the internal divisions of Codugu, it will not here therefore be requisite to state their relative position with regard to each other, as a slight inspection of the sketch here offered, will convey every desirable information on this subject, and the table given in page 5 will be found to solve every question, that could arise as to their superficial extent; a few brief observations however may perhaps illustrate both.

Codugu, was divided into five talooks under the late Rajah. Yailsowra on the north, Kiggutt naad on the south, the centre space which may more particularly be called Codugu proper, being under the immediate control of the Dewan Cutcherrie at Muddukayray. The districts below the ghauts are partitioned into two talooks that of Sooleeay and Poottoor.

Those larger divisions formed for the purpose of civil administration have at different periods been modified or altered, as caprice or convenience may have dictated, the smaller component parts which form them, are the ancient partitions of the country.

A talook consists of any indefinite number of naads, this being the next smallest territorial division, it is again subdivided into grumas, and those into magunies,* which are still further separated into wurgas, this last name denoting the fields or estate of the husbandman or occupant.

The term naad pronounced sometimes *narrh*, is general throughout the more southern parts of this range of ghauts, and much used in Malabar, but scarcely known towards the northward of Codugu; this denomination means district generally, but sometimes country (as Wynaad &c.) the divisions of the talooks of the lower country are arranged exactly after a similar manner with those just mentioned, their denominations however having some difference, the term magunnie being substituted for that of naad, which it resembles in every other particular.

The lesser divisions of Yailsown are denominated *hobelys*, this is similar but generally smaller than the magunnie and naad;

* It will be perceived that the two smaller divisions here mentioned, are not inserted on the map, or registered in the list of villages, anxious to obtain those particular, frequent applications were made for them but without success, the native authorities evincing the most unaccountable solicitude to conceal them. Indeed, however strange it may appear, it required the utmost exertion to obtain the list now given. On the first commencement of the work every attempt was made to mislead the Surveyors in this particular and nothing but the most distinct assurances that such a proceeding must necessarily put an immediate stop to the undertaking could produce an alteration in the conduct that had been observed. After a considerable period of delay and prevarication, a register of the whole of the villages and other divisions was at length procured from the Cutcherrie, the omission of the smaller names being pointed out, was met by the assurance (so entirely unfounded, that those using it must have been quite indifferent as to the expectation of belief) that the list which had been furnished contained every particular that could be given, and such precautions were taken, that it was impossible to learn those names which were withheld, as the Inhabitants had particular instructions not to inform the Surveyors.

Nunjarajputtun has no intermediate subdivision, it consisting merely of the naad and its gramas.

The divisions of Poottoor it may be perceived, are rather intricate, this arises from the circumstance of their having undergone some alterations subsequent to the transfer,* the small magunnies noted as forming the four large ones which compose the talook are some of the ancient divisions which though now recognized by the people, are not used in the administration of the country.

The magunnie of Soobramuhni exists in a very detached shape this originates in the villages forming it, having at one period being held in Inam by the celebrated Pagoda of that name.

In the districts below the ghauts, it will be observed that an insulated portion of the Company's territory is included within the Codugu boundary, this consists of some estates which though within the limits of the country transferred by the Company in 1804, were specially stated as forming no part of that which had been ceded; particular reasons doubtless must have influenced this arrangement, no information however has been acquired, as to the exact motives that caused the disposition thus made; there are a few other places, sometimes only fields, coming within the Codugu limits; no inconvenience however has been found to result from this intermixture of country.

The boundaries of the interior subdivisions are mostly arbitrary and factitious, in many instances however it will be seen that they occasionally follow the course of the large streams and ridges, but as a general remark, they have but little reference to natural limits.

No system of territorial partition could be simpler or more complete, it presenting a regular series of subordination requiring nothing to perfect it, there is however a great irregularity in the areas of the different divisions, but we are not in possession of the motives that guided the partition of the country into those several parts, it is diffi-

* The portion of country ceded by the British Government to the Codugu Prince in 1804 was severed from the Canara collectorate.

cult to say, nor perhaps is it materially necessary to know, what cause may be assigned for this disproportion in the superficial extent of the various divisions.

Principal places, cuss-
bas, market towns, &c. In Codugu proper there can scarcely be said to be any large towns, the population is extremely scattered, the inhabitants living on the borders of the cultivated valleys, and universally in insulated dwellings distant from each other in proportion as the situation of their fields will conveniently admit of; and separated on an average little less than half or quarter of a mile asunder, the larger divisions have not in most instances a principal village, each naad however in every case has a cutcherrie the residence of the Shanaboge (or native Revenue Officer) where the business of it is transacted.

Coadlypott. The chief places in Yailsowra are Coadlypott and Sunnywarsuntay, the former of those is the capital, it is situated in the northern part, and in the hobly to which it gives its name, in this town is a cutcherrie, the residence of the Chief Officers of the district, it contains about 60 houses, and is a market place of some eminence, the fair held here on every Sunday being numerously attended; it is also the seat of some little trade, the rice of the interior being here exchanged for the dry grains and cloths of Mysore &c., this traffic is principally in the hands of a few Sivabuctar merchants.

Sunnywarsuntay. Sunnywarsuntay as the name implies, is the place where Saturday's market is held, it is in Bulla hobly, and situated immediately in the large road which crosses this narrow neck of land, it consists of but a few huts and a cutcherrie for the purpose of collecting the sayer duties, which from the local circumstances of the road are very considerable; the market is a place of great resort, its central situation rendering it particularly well adapted for the purposes of traffic.

Ramapoora or Ra-
masamy cunnawey. The next place of consideration is Rama-
poora or as its more generally called Ramasamy
cunnawey, this is situated on the bank of the
Cauvery in the southern part of Nunjarajputtun naad—there is no

town here, it consisting of a few wretched scattered huts not deserving that appellation; this is the station of the cutcherie of the District, and is a market place of considerable importance, the fair occurs on a Wednesday, and generally attracts a large concourse of people; bordering the confines of both countries, and on a principal road it engrosses all the trade of the adjoining parts, this being the principal place from which the rice of the neighbouring districts is exported.

Soainwarpett. . . Soainwarpett is the next town that claims attention; a market is held here on Monday, it is well supplied and numerously frequented, the place itself however though dignified by the appellation of petta is of but little consequence consisting of only about 30 indifferent houses.

Muddukayray the capital of this mountainous principality, is situated in the midst of the hills and somewhat in a central position, it seems to have been chosen from its comparative difficulty of access; and this feeling appears common to most Indian Highland Chiefs, as they are found invariably to fix on (as if to render security more secure) the deepest recesses of their Alpine retreats for a place of residence; Muddukayray we are informed was fixed on as the seat of Government by Doda Veerappa one of the early princes of Codugu; lying on the top of an elevated table it is nearly the highest inhabited land in the principality; its local position is extremely picturesque and beautiful, surrounded by an amphitheatre of hills; it is situated in the small basin at their foot, and sheltered in some measure by them from the violence of the winds, to which its elevated site would expose it.

The town of Muddukayray is small and insignificant, it consists of a petta lying a short distance east of the fort, running in a long, and rather straggling line, which scarcely allows it the merit of regularity, some scattered houses, lie immediately close to the fort, the whole however, in both places, not amounting to more than 300; most of them of a wretched appearance, and few with the exterior of comfort, or cleanliness; The seat of no trade, or manufacture it owes its importance entirely to being the residence of the chief, and indeed, is principally inhabited by those belonging

immediately to his personal establishment. A market is held here every Friday, it is most abundantly supplied, and attracts a very large concourse of people, most of whom however belong to the country.

Veerajenderpett. Veerajenderpett is the largest, and it may be said the only town in Codugu, it is situated in the southern parts 16 miles S. E. of Muddukayray, and immediately on the communication between the Western coast and Mysore ; though a place of the greatest consequence in the country, it is of recent birth having been founded by the late Rajah about 25 years since.* Its first population consisted of those, whom he had in his predatory excursions swept away from Mysore ; but principally of the inhabitants of Periapatam, who fled here for protection when that place was destroyed by the Sultan to prevent its falling into the hands of the British.

Veerajenderpett is a large straggling town containing about 500 houses, upwards of 200 of which belong to christains ; they are however, almost all of a mean appearance, and although the whole permanent trade of the country is centered here, there are but few symptoms of either affluence, or growing prosperity : having no manufactures, its chief support must be in traffic, for this, its situation is particularly advantagous, fitting it in a great measure for being a staple between Mysore and the Western coast, at present however it has not attained this desirable perogative ; it is notwithstanding a mart of some consequence, and the fair which takes place here, every Friday, is the largest of the periodical markets held in the country ; all the produce of the southern parts is brought here for sale, also that of the districts in its vicinity, it being the principal place from which they are exported, the neighbouring inhabitants of Mysore resort here in great number. Rice is the chief article which they take away with them.

* It was established by Veerajender in commemoration of a meeting that took place between General Abercromby and himself during the war with Tippoo some time in the year 1792

Bágamundala is the principal place of Thawu-Págamundala. naad, it is situated at the junction of the Cauvery and Kunnikay streams but owes its celebrity more to the Pagoda there than its size or trade, it consisting only of a few scattered houses.

Kiggutt naad. There is no town of any description in Kiggutt naad through which even the smaller villages are but thinly scattered. The cutcherie which is considered the chief place is in Ungigayray naad; the principal authorities of the district live at it.

Besides Muddukayray there are three other Arrah-Palaces. muhni, or palaces, the most remarkable is Naku naad, it was built by the late chief, and is now occupied by some branches of his family; the next is Gurrawully in Guddy naad where reside the descendants of the second brother; and lastly Hahlayray in the naad of that name. This was the residence of the present chief before his accession to power; the three palaces just mentioned are not remarkable either for extent, or elegance; the first is the largest, it is fortified after the native fashion by a strong wall with small round bastions at the angles; the circumference of this fortification is exceedingly limited, it is however surrounded by a very deep ditch, and high embankment, leaving a small open space between the inner walls, and this outer work; the approaches to it are guarded by various barriers, thus, making the whole comparatively strong, the other two have but little remarkable about them, they are after the plan of all other native houses, but well built upon a very large scale, and encompassed by breastworks, and the road leading to them secured by barriers. The lands in the immediate vicinity of those palaces are estates severally belonging to them.

There are no other places worthy of notice Remarkable places above the ghauts, and below them there are but below the ghauts few of any consequence, indeed, none in Sooleay. Bullaree the capital of the magnumic of that name may deserve mention, as being a place of some small trade, the cutcherie here is the seat of the principal authorities of the district. Bedderholay, Neirrenuggurra, and Kullukah situated on the great road proceeding to Mangalore are each small towns consisting of, from 15 to 20

houses and in them centre the little traffic carried on in those parts.

Poottoor though the chief place of the talook Poottoor. has no petta, and is only remarkable for a large Pagoda, and being that where the principal cutcherie is stationed; Uddoor the capital magummie of that name is situated exactly under similar circumstances.

The enumeration that has just been given, contains all those places that deserve any particular mention, it will not be necessary to state any further here the different places where cutcherries are situated.

The Table of Division and villages &c. shewing all information of this nature, and as it has been already observed, that, there are no particular cusbas to each of the minor districts, it will be understood that those offices are the chief places of them.

The rugged aspect of the country fully Forts Droogs &c. answers all those purposes for which regular fortifications are designed, strong in its numerous fastnesses, it is almost everywhere fortified by nature, each hill, offers a new post, and thick woods present, a place at once for concealment and defence, thus guarded, it requires but little art to increase the obstacles which naturally oppose themselves, this has been done to an extent, that speaks forcibly the attachment of those mountaineers to their native wilds.

Though for a long time the chief place in Fort of Muddukay-ray. Codugu there was no fortification till the reign of the Sultan who erected the present one.

As a military post Muddukayray owes its strength entirely to its situation, the elevated table upon which it stands once surmounted, all difficulties may be considered as overcome, encompassed by a circle of hills the approach is everywhere difficult, it is shut in by 4 gates each commanding the heads of the only passes that give access to it*, those ghauts are generally steep and broken, and

* *Vide series of Routes.*

the approach to them naturally rugged, can be otherwise variously obstructed; strong from their position, occupied by a small number of men, and defended with any ordinary share of resolution, they could not be forced without considerable loss to the assailants. The south ghaut is comparatively short being little more than half a mile, the road is very steep, but good, and partially free from forests; the ascent of those on the east and west is considerably longer, and more rugged, and both are enveloped in thick woods; that on the north is much the best pass, both as to length and ascent, indeed, the extent and acclivity of it is comparatively trifling, the entrance to those passes is flanked by a deep ditch, the gates however at the head of each are weak, and could be readily forced, none of them could resist a petard.

Tippoo, as has already been said, built the present fort of Mudukayray, doubtless for the purpose of securing more effectually his conquests, and agreeably to his system of nomenclature, he set aside the Hindoo name, substituting in its place the Moslem appellation of Zutlerabad; he displayed but an indifferent judgement in fixing on the site of the fort, as it is completely commanded on the west, the small hills in that direction quite overlooking it. It is situated on the summit of a low top, and has a rather steep acclivity for about half its circumference, the remaining part, that is, the north and west has a gentle ascent, and on this account must be deemed the weakest. The figure of the fort is irregular, and its walls in few instances conform to the scarp of the hill. The ramparts (on which no guns are mounted) are about 8 feet thick and nearly 20 high, the parapets however are only about one fourth that breadth, the whole is strongly built of stone and mortar, it is surrounded by a ditch which in point of breadth and depth, is not of sufficient magnitude to offer any material impediment, there is a very large space between the foot of the wall, and its scarp nearly 30 feet; the entrance is on the south, and like most native fortifications it is intricate, and circuitous, close to it and immediately under the walls are some of the Public Offices, they are built upon an elevated platform (surrounded by a slight parapet) to which a neat ornamental gate gives access, those buildings (in a military point of view) greatly encumber the entrance of the fort, and materially increase the fac-

ties of its capture the whole is in excellent order and preserved with much care. Its regular garrison consists of 300 Codugus, who are relieved agreeable to the ordinary routine at the expiration of every 15 days. The interior space is occupied entirely by the Palace, and the offices belonging to it. It is inhabited alone by the Rajah and his suite, indeed the whole may merit the designation of a fortified castle more perhaps than a fortress.

* From the above description it will be seen that this fort is evidently, but little calculated for defence. Capable of containing but a small number of men; constructed without art, and so completely commanded by the hills in its neighbourhood, it could make no resistance against bombs, or even canon of a small calibre; the nature of the ground would leave a choice in conducting the attack, and indeed, there would scarcely appear to be much necessity for those preparations, as it seems quite capable of being taken by a *coup-de-main*. A well directed escalade (the assailants having shelter in most places till reaching the foot of the walls) could not fail of being attended with complete success.

With the exception of Muddukayray there is no regular fortification of any kind in the country; the hilly nature however of it presents innumerable places, that could be readily rendered defensible, and which might easily be concealed amidst those almost impenetrable abodes. All native chiefs are fond of having some strong-hold to which they might retire in the last extremity, and though there is every reason to believe, no such now exists here, the country in the vicinity of the ghauts offers numerous points, where a retreat of this nature could be easily formed.

* A disinclination to increase the feelings of suspicion which were evidently entertained by the Rajah, prevented a survey of the Fort being taken after the manner that could be desired—that is on a very large scale, and by absolute measurement with the chain—such a proceeding however, would have produced considerable uneasiness, nor would the attainment of this object be accompanied by any adequate advantage, it was therefore considered prudent to waive any measurement of this nature. The accompanying plan however exhibits a survey of the Fort and the surrounding country. It is done after the usual manner and on an enlarged scale, this sketch together with the description given, it is hoped will convey every desirable information on the subject.

Cuddungs or
Breast works.

The breast works here called cuddungs which are seen in almost every part of the upper country, afford a singular instance of the indefatigable perseverance, with which those highlanders toiled to secure the possession of their hills, those monuments of their exertions are said to be of ancient date, and the large forest with which they are mostly overgrown, would entitle us to come to such a conclusion, the great distances to which they stretch, the steep acclivites they ascend, and the high ridges they surmount, cannot fail to impress a feeling of wonder, at the immense labor, that must have been required in the formation of them, those lines presenting a similar front almost always looking towards the surrounding countries, the exact conformity of their construction, and the solidity with which they have been made, their situation, running along the crests of the hills in the more mountainous parts, and in the comparatively flat country towards the eastern borders in most cases flanking the roads, all combined to impress a conviction that they have been formed as it evidently would appear for the purposes of defence. Such doubtless has been their general destination. The change of manners and habits leaves us in obscurity as to particulars. No immediate connection as a whole can be traced; as they pass along the tops of ridges or over slopes for considerable distances, never assuming any distinct figure, but always conforming themselves to the inequalities of the ground and terminate abruptly in the woods; it may however be generally observed that they occupy the most exposed places, the forest being in itself considered a sufficient defence, they are frequently seen in small insulated portions, for which it is not easy to account. It will be seen that they are uncommonly numerous on the road to Bagamundla from Mudukkayray, the necessity of so many defies conjecture, they may however suggest the question, whether they owe their rise to intestine feuds or foreign wars. A portion of those defences have resisted the effects of time being still in tolerable repair, and from what is left, some idea of the original design may be formed; as Military works however they are nearly useless, their great length rendering it impossible to defend their whole extent.

The situation and course of the principal cuddungs have been marked on the map, innumerable others are everywhere to be met

ith but are now too imperfect to be traced.

Defences of the Roads The care taken to secure the passage of the great roads, and even to barricade the smaller paths, adds another proof of the solicitude with which the Codugus guard all approaches to their mountains; similar apprehensions suggest in most instances the same precautions. All mountainous Rajahs are remarkable for rendering the access to their possessions as difficult as possible, it appears a part of the policy of the authorities here, to limit the greater communications to as small a number as is at all practicable, and to impede the few there are, by innumerable barriers. Many of the roads are studiously lengthened, that for instance leading from Mysore to Mudukayray is remarkable for the unnecessary circuity of its route, all are narrow and rugged and difficult, the breast works that intersect them are formed of a deep ditch, and high bank; a reference to the routes will shew the number and situation of those stockades, and exhibit in minute detail the general character of the communications with, and through the country, as also the various obstacles that are to be encountered on them.

Villages and Towns There can scarcely be said to be any towns in Codugu.

Unlike the open country, the villages of Codugu (with the exception of Yailsowra and Nunjarajputtan) consists of detached habitations extending along the narrow valleys that wind at the foot of the high grounds, and an indefinite number of those cultivated glens have the collective designation of grama, which may be translated canton or township to which it has a considerable resemblance; this is divided into several minute portions termed mouzas, muzeras &c., which are considered dependencies of it; the lands belonging to the grama, are marked by a well defined boundary. In Yailsowra and Nunjarajputtan the villages are arranged on a different system, being in those districts in a more collected form, their arable grounds lying immediately contiguous to them.

It will not be required here to describe the internal economy of the village administration, the arrangement common throughout

the western coast appears equally to prevail on the whole of that mountainous tract, occupying the immediate summits of the ghauts, such at least is the case throughout Codugu; the number and occupation of the officers belonging to the village establishment, differing in no particular, and the same admirable system as to the government of the little community can be traced in every instance. The accompanying Register will be found to contain a list of all the interior divisions of the country, also of the villages belonging to them, exhibiting at the same time the actual position of each from the nearest Trigonometrical station.*

Waters &c. Codugu enjoys all the abundance of water consequent to a hilly, and well wooded country. The rich garb of forests which clothes almost its whole surface, retains a humidity that produces a luxuriant form of trees, and herbaceous plants, which brings to recollection the florid vegetation of more temperate climates. It is every where furrowed with rivulets, and traversed with numerous smaller streams branching from them, those generally have a constant supply of water, the more hilly parts are highly salubrious, and water for irrigation, or domestic purposes is generally plentifully afforded. Wells are uncommon, nor indeed are they at all necessary. Yailsowra and the flatter parts of the eastern boundary are not so happily situated in this particular, but neither are remarkable for any striking deficiency.

The lower country is also furnished profusely with this important element; springs descending from the higher grounds diffuse a freshness and vegetation, in all the numerous little valleys through which they shape their course, those parts in which the arreca plantations are numerous, enjoy an abundant share of this necessary article, indeed, there is sufficient for the irrigation necessary for a second crop in every part of the lower districts, and occasionally enough to mature a third; it is however only the deep narrow glens occupied by the arable lands, that are thus favored, the high grounds with the exception of the woody parts of Soolecay bordering the foot of the ghauts are for the greatest part of the year parched, arid, and quite

* *Vide. appendix No. 1*

devoid of vegetation. The whole of Poottoor presenting one extent of naked rock on which are seen only a few verdant shrubs to vary its painful uniformity; the rainy season, being the only period in which the elevated lands throughout those parts, assume a more verdant appearance.

Rivers &c. The waters of Codugu divided by the ridge of ghauts fall into the sea washing both coasts of the Peninsula, those of the upper country flowing into the Bay of Bengal, while those of the lower districts, are lost in the Indian Ocean.

It may generally be observed that none of the rivers of Codugu are considerable, either as to breadth, or depth; their supply of water however is everywhere generally abundant and constant, their sources lying so elevated, added to the steep declivity of the country, impels their streams with a rather rapid course, they are with the exception of the Coomardarray not navigable, and almost wholly useless for transport of any kind, except when swelled by the periodical rains, during the continuance of which, rafts might be used on them.

The inequalities of the country through which those rivers shape their course, and the general height and steepness of their banks, (which they are not subject to overflow) necessarily precludes the possibility of their promoting culture by a diffusion of their waters; there are no works, or anicuts of any description on them, the numerous subordinate rivulets answering all the purposes of artificial irrigation*.

The whole of the minor streams intersecting Codugu vary only particularly in size, their general characteristics (a rather deep and rugged bed, through which alternately flows a shallow rivulet, or

* Close to the village of Hanugad beyond the Codugu frontier in Mysore there is an anicut across the Letchmun Tirut, there is also one across the Cauvery at some distance below the village of Sayrungarel, this however is also in Mysore.

rushes a tempestuous torrent, as influenced by the seasons) being in most other instances quite similar.

It may here be observed that the rivers both below, and above the ghauts in Codugu, begin to swell in the early part of June, and flow with a violent, and boisterous rapidity till October, when their streams become more placid. The excessive and continued rains common amongst those hills for the intervening months will readily account for the immense body of water, that during their continuance forces its passage even by the smallest rivulets, which widen into torrents, and subsiding with the course, leaves an immense chasm, that is but partially occupied by the stream during the other parts of the year,

Cauverys Codugu proper gives birth to the Cauvery and two principal streams tributary to it, the Sornawutty on the north and Letchmun Tirut on the south, the former running for its whole extent within the country joining it, at the village of Cooldigaig (on the boundary), the latter continuing its course for some distance through Mysore, and fertilizing the districts on its borders unites with the parent stream.

The rivers of Hindooostan, doubtless from their beneficial effects, are supposed to be the offspring of some divinity, and their rise and confluence held in religious veneration by the Hindoos; each river has its parent deity, and a wild and fanciful polytheism makes them the scene of some remarkable events connected with their theological History.

The source of the Cauvery does not fail to attract the devotion of the pious, it issues from amidst the recesses of the Western ghauts, and the spring from which it takes its rise is fabled to have been a Nymph of exquisite beauty, the daughter of one of the seven Rishees who while performing Tupysa (or penitential devotion) dissolved into the little fountain which now yields its modest, and distant tribute to the ocean. Immediately on passing Bagmundla it is joined by the Kunniky the Naiad of whose stream is like her sister Goddess the subject of a romantic fiction.

Ishwara is worshipped at the source of this river, his temple however is exceedingly small and mean, indeed the place altogether owes its celebrity to its sanctity, and must rest its claim to distinction on its intrinsic excellence, entirely devoid of architectural grandeur. If the weary devotee forms his expectations from the splendid edifices of Benares or Juggernaut, or the numberless other holy places in making the pilgrimage of which this forms a stage, he will be disappointed.

No remnants of antiquity decorate this interesting spot; the sacred spring is in the form of a reservoir of about 10 feet square, and 2 deep, it is enclosed amidst mountains (those in its immediate vicinity are dedicated to the seven patriarchs) and is surrounded by wild and picturesque scenery. The road from Bagamundla is nearly 3 miles, winding gently among the heights, but has none of those monuments on it that frequently adorn the avenue leading to any remarkable place of worship—There are 3 temples immediately at the junction of the Cauvery and Kunniky, they are dedicated to the Hindoo triad; those edifices though considerably more elegant than that above, merit but little attention. The sungam or point of confluence is reckoned holy, although of greatly inferior efficacy to the source.

Tulla Cauvery ranking high among the places of religious sanctity, devotees of all descriptions constantly resort to it, either in the fulfillment of some vow to propitiate the deity, or in the ordinary course of their pilgrimage; but at the Jatra, or annual festival which takes place in September, the concourse is said to be from 5 to 6000 and from all parts the superstition is stated to be of a profitable nature, each pilgrim as he bathes in the Holy Fountain places a piece of money in it, and those votive offerings are carefully transferred from the Treasury of the deity to that of the Cirear—a great liberality however is shewn to all whom purposes of devotion may have brought to the celebrated fair, as they are fed for the whole, or large part of the period they may remain.

*The Cauvery may be considered from its length, and the volume

* The space of country whose waters contribute immediately to the Cauvery is 426 $\frac{1}{2}$ square miles.

of waters which it carries to the sea, as one of the principal rivers of the Peninsula, it pursues a course of nearly 400 miles, and after fertilizing Tangou disembogues between Negapatam and Tranquebar, mingling its waters with those of the Bay of Bengal. The course of this fine river through Codugu is very tortuous, and its banks are overgrown mostly with a stately forest, which for the greatest part of its whole extent overhangs its borders, they are universally of a rich clay or mould, and every where sufficiently high (on an average nearly about 15 or 20 feet) and steep if not precipitous, as to render their ascent difficult, the general breadth of the river is liable to some varieties, but it imperceptibly increases from its source, its extreme width at the point of departure being about $\frac{1}{2}$ of a mile, the bed over which it flows differs in various places being occasionally sandy, pebbly and rocky; the latter feature may however be considered as the most pre-dominant, and consequently is subject to great irregularities of surface. The established passages over the Cauvery are exceedingly limited during the dry months; there is only about 3½ feet water where it is usually crossed, the river however is not generally fordable even at this season, its depth throughout being extremely unequal varying almost every furlong, but in most parts of the latter 20 miles, it is of sufficient depth to render boats (except in a very few places) at all times necessary. The river forms a strong barrier, and well fitted for defence, the roads leading to the passage of it are stockaded, and could not be forced without some difficulty. The Cauvery from November to the end of May has a rather lovely stream, and a considerable body of water when the vicinity of its source is considered—immediately in the neighbourhood of it, the smallest depth may be 2 or 2½ feet, but the greater portion is much beyond this; for the remaining part of the year it assumes the restless impetuosity of a torrent, and during this period is possible to be forded from a short distance west of Bagamungalam

14208.

*A branch of the Soornawatty issues from the Soornawatty. table land on which Muddukayray is situated; its waters however chiefly flow from Cotta Betta, and the numerous mountainous ridges, and minor heights that run in every direction from this immense hill, it will not be desired parti-

* The space of country whose waters contribute immediately to the Soornawatty is 266 $\frac{1}{2}$ square miles.

It is difficult to enumerate the countless rivulets that contribute to swell the fine stream, as they offer no exception to the general observations that have been made, their course from the rugged nature of the country is extremely winding, their banks are of clay overgrown with jungle often steep, not unfrequently rugged, and passed with difficulty except at established fords; their beds are generally stony, and their breadth variable—not however very considerable—the flow of water varies with the season, during the rains it rolls rapidly along, but for the other parts of the year has a tranquil stream. The nullahs may be considered in most instances as perennial.

After passing the village of Gurgandoor, the Soornawutty joined by many of its tributary branches, begins to assume the appearance of a river; it is here about 400 feet broad, and increasing in size from the accession of the numerous streams on either bank, is nearly as large as the Cauvery at the point where it unites with it; leaving the village of Hahdagayray the banks of this river become rather high and steep, and thence continue so throughout, they are generally of clay, and during the latter part free from forest; its waters run over a bed, in most places rocky—their depth as has been said is influenced by the seasons; in the monsoons it has an impetuous tide, which after October gives way to a gentle stream, in the former instance it is not to be forded but during the latter period, is little more than 3 feet deep.

**The Doad Holay or Luchmun Tirut is the principal channel by which the waters of the southern parts are conveyed to the Cauvery; this river rises amongst the Burumagarry hills, its source situated at the foot of this ridge, is a place of pilgrimage, the little spring however that is the object of religious veneration, has nothing but its intrinsic sanctity, and the picturesque wildness of the surrounding scenery, that can recommend it to observation.*

The Luchmun Tirut river runs but a very short distance through Codugu, nor is it in any place during its course remarkable for its size, the extreme breadth may be averaged at about 140 feet

* The space of country whose waters contribute immediately to Luchmun Tirut is 3121 $\frac{1}{2}$ square miles.

gradually decreasing of course as it approaches its rise ; springing from so extended a range of mountains, and running through a country whose general character is woody, this river as will be inferred has a constant supply of water, like the others it varies in quantity, but when not filled by the rains, its depth, from where the small rivulets unite to form the larger stream, may be about 3 feet; it cannot be called fordable in the rains, but is so during the dry season, the steepness of the banks alone offering much impediment at this period—they are of clay and shaded by forest—the bottom is universally sandy.

The inconsiderable portion of the waters of upper Codugu that flow into the Indian Ocean, discharge themselves chiefly by means of the Burrapollay, a small river that passes into the lower country by a gradual descent through a deep chasm in the ghauts, which during the latter part of its course, forms a rocky wall on each side ; it drains the waters of 192-12-64ths square miles.

There is nothing with regard to this river which is of sufficient consequence to require a specific mention ; it has a constant flow of water, and, while in the upper country, a sandy bottom.

The Burrapollay is a branch of the Brully-Burrapollay. patam river, which falls into the sea at the town of that name, and is navigable for small craft as far as Illicoor a village on its banks, situated 16-6 miles from the foot of the ghauts.

* The Hemawattay is now the only river Hemmawatty. of consequence above the ghauts to be spoken of. It rises in the hilly parts of Bullum, and the waters of Codugu contribute but little to its stream. The Hemawattay passed for an inconsiderable distance along the northern boundary, its bottom is sandy, and its depth little more than 3 feet in the fair season, which is the only period it is fordable, the banks are steep, and like the other rivers in the interior, is incapable of irrigating the country on their borders.

Rivers below the Ghauts. The Noojeekul, or as it is otherwise known the Pruswunni river, descending from the ghauts that skirt the eastern border of the Sooleeay

* The space of country whose waters contribute immediately to the Hemmawatty is 844 square miles.

district, and the Coomardarry springing from the foot of the Soobramuhni hills, are the principal rivers that intersect the lower districts—the former disengaging at Chundarghuray, and the latter falling into the sea at Mangalore.

The union of the Sumpajee and Bullanaad river. The Pruswunnie Holay, (the point of confluence taking place at Payrahjee,) forms the Noogekul, which having run for some miles, and being joined by various minor streams, during its course assumes the name of the Pruswunnie—this river flows through a country generally hilly, at least of a very irregular surface, and partially covered with forest, it enjoys consequently a large and never failing supply of water. Its stream from October to May glides tranquilly along, and may at this period be from 3 to 4 feet deep in those parts where it is passed, but in this particular its character is liable to much variety, and in most places it is of great depth, it is however only during the monsoon when its enlarged stream rushes with a restless impetuosity, that it is at all navigable, and is then only useful in floating timber by means of rafts—The tide affects it but a short distance from its mouth. The passages of this river are rather numerous; but it is not even in the dry season everywhere fordable, its breadth however is not great though it is tolerably uniform in this particular throughout, being where it quits the Codugu districts of about 400 feet, and in the higher parts 100 less.

The bed of the Pruswunnie is generally of a rocky character, and consequently very unequal in its surface, its banks are rather high and steep after passing Payrahjee; approaching the sea however they become gentler, and much less precipitous, they are throughout of clay but though low, the waving nature of the country on their borders renders it impossible for the waters of this river to be of any use in promoting cultivation.

The Coomardarry being the northern boundary dividing the lower districts from North Canara, is but partly formed from the waters of Codugu. In most material points its character is quite similar to that of the Pruswunnie, its banks however are not remarkable for height during the early part of its course, but they increase in this particular as they approach the sea. It passes through a rather rugged but well

cultivated country, the low steep hills that cover its surface generally run close to the river, its banks consequently are incapable of being rendered subservient to agricultural purposes, the flow of water is always considerable, the depth in the higher parts may be about 2 feet which gradually increases to 3 and 4 where it branches off from Codugu; it is crossed in numerous places but is not generally fordable in the dry season, and during the wet, the force and velocity of the stream renders a passage of it impossible except in boats. The bed is partially rocky, its breadth at its extreme points may be from one to seven hundred feet.

The village of Oopin-Ungadday is situated where the Coomardarry and Nettrawutti meet; from the point of confluence the united streams assume the latter name, and pursuing their course to Mangalore, form one of the finest of the numerous rivers that intersect this coast, it increases considerably in breadth, and when near its mouth spreads into a beautiful Bay. The Nettrawutti though useless for purposes of irrigation is of infinite service for those of commerce, it is navigable for small craft to a short distance beyond Oopin-Ungadday, and from the commercial town of Buntawalla on its northern bank for boats of considerable size, the influence of the tide reaching to this place.

Irruday Holay. The Irruday Holay is characterized by all those particulars, that mark the two rivers last spoken of, it however is smaller than either being at the point of departure only about 250 feet broad; its flow of water is abundant and perennial.*

A view of the map will show the minor streams that contribute to the principal ones of the lower districts, it would be an unnecessary repetition to give a specific account of each, as they cannot be said to have any peculiarities that render them an exception to the general character which has been given of such secondary channels.

* On the bank of this river close to the village of Irruday (and belonging to the Company) is a hot spring, immediately in its vicinity in the bed of the river also issues one or two small streams of a similar temperature. An account of this spring will be found given.

Lakes, Tanks, Reservoirs &c. Throughout Codugu there is not a lake or reservoir of any kind meriting particular observation; in the more hilly parts such are quite unnecessary, and consequently unknown. Yailsowra and some parts of Kiggutt naad, are the only places where tanks are to be found, and they are exceedingly diminutive in point of size, the largest not exceeding at the utmost one quarter of a mile square, and but very few reach to this area; they are all for the purposes of irrigation, and contain for most part of the year a small quantity of water—there is nothing with regard to those reservoirs of sufficient consequence to deserve any further notice—if they are at all remarkable for any thing, it is for the numerous quantity of wild fowl,—principally ducks and teal—with which they are covered for a few months subsequent to the rainy season.

Forests, Woods, Jungles, &c. The whole of Codugu proper is clothed with stately forest, it is however the declivities of the ghauts where the trees attain their greatest magnitude, this stupendous ridge which though steep is neither broken or rocky, and is everywhere covered with a rich stratum of mould, brings to maturity timber of a prodigious size; a large portion of the eastern boundary presents a wide extent of forest, but though by no means of scanty growth, it is comparatively so, with that which shades this chain of mountains. Bamboos in all their varieties compose a large part of interminable woods, and this most useful, and beautiful reed, is here found in the greatest excellence. The jungles are difficult to traverse; in many places the Rattan of various dimensions, and nearly of as good a quality as that brought from the eastern islands, together with the delicate reed from which the Hindoos make their pens, aided by unnumerable plants and creepers, not unfrequently forming an impervious underwood.

Such a vast assemblage of woods leaves a large scope open to the labors of the Botanist, and there can be no doubt his researches would be attended by results equally interesting, as the field of inquiry is novel and extended—to such must be left a scientific classification of the woods in Codugu, as a very general catalogue of the most common will only be here attempted.

Hulsiná, Jack, (*artocarpus*) extremely common in the upper

country both in the neighbourhood of the villages, and throughout the jungles. It grows to a large size—makes excellent planks.

Heb, Hulsina or Aginney. This is the wild Jack, grows in the thicker forests, and reaches a great height, its fruit though eatable is small and very unpalatable, it furnishes large and excellent beams and planks, when cut it has a light yellowish tinge, but after some time approaches the rich dark color of mahogany.

Those stately Palms grow in great quantities Maurie. on the sides of the ghauts. The Elephant is partial to the leaves of their branches, and often destroys the trees for the purpose of getting at them. Toddy is extracted from them by a poor caste of people called Coodyer.

This tree is considerably smaller than the Wild Arreca. garden one, but in every other particular resembling it; it bears a small fruit, which is used as a substitute for the arreca nut amongst some of the lower classes; it splits with great ease, and is calculated for laths.

Arregee or Arringy. Produces large timber, and is useful in building: this is only common below the ghauts; the bark of this tree is turned to a useful purpose being carefully stripped off, and undergoing a slight preparation, it is manufactured into bags for transporting grain, and sometimes into cloths, continuing servicable for sometime.

Mangoe (*Mangifera*). Grows to an immense size throughout the country, but its fruit is everywhere indifferent. Tamarind This tree only thrives on the borders of the more open country. It is met with in the interior, but does not there produce fruit; in the absence of this necessary seasoning that of the Punnapooly is used.

Punnapooly. This is a beautiful tree, large, regular and elegant in its form, the fruit of it is something bigger than the Olive, shaped like it, excessively tart, and makes an excellent condiment. Oil is said to be sometimes extracted from its kernel.

Doopada (*Vateria indica*). This is known as the Damer tree, from it exudes a gum much used in incense, it has a

beautiful foliage, and grows best in damped situations. The timber is of but little value.

Boolundy or
Nandy.

Attains a great height, its timber is useful in the coarser woodwork of buildings.

Chempay or
Sumpay.

This tree is common throughout the upper country, it reaches a great stature, and produces excellent timber, there are two species of it, differing however not very materially; its wood is of a close grain easily worked, and capable of being put to many useful purposes, it makes good furniture, is used to great advantage in buildings, (affording large beams) and even in nicer workmanship, answering well for stocks of guns &c. This tree is frequently met with in the vicinity of religious temples as it produces that delicate flower with which the Images in them are adorned.

Kooloomy.

Of great size, and useful in building.

Nayrula.

Large and useful, the fruit is of a black color like the sloe, and is eaten; of the wood ploughs are sometimes made.

Baaga.

Large but useless.

Ummay.

Produces a small eatable berry having an agreeable flavor, is excellent firewood.

Bussaree.

Ropes are sometimes made from the filaments of its barks, it has a rich foliage, affords excellent shelter from the sun, and is always found near choultries, and places of worship.

Kyoeloo.

The bark of this tree also furnishes ropes more flexible, and otherwise better than those manufactured from the former.

Becty or the Blk-
wood tree.

It is met in great size, and large quantities in the forest along the eastern boundary, it is good timber, but not used as such, being only generally cut for the purpose of making flambeaus for which it is well adopted from the quantity of oil it contains; it makes excellent ramrods.

Noga. A large and beautiful tree its wood is light, and from it is manufactured the Noga or yoke connecting the cattle employed on the plough—from this it takes its name.

This tree is the native of a comparatively poor soil, it is found in the lower districts where it predominates: it is straight, grows to a great size, and affords excellent and durable planks and beams; from its bark is manufactured the best edible chunam, and the only kind here used, the process for making it is simple; the astringent qualities of its bark renders it useful in tanning.

Golee. Its bark makes good ropes.

Aulaalu or Bauian-tree. Too well known to require a character here.

Sauntee. Large but useless.

Siddee. Exceedingly large, and very hard, great quantities grow on the sides of the ghauts, it is said to be good timber.

Powillay. Small, and only fit for firewood.

Yaillundee. Small, produces an olive shaped fruit which has an agreeable flavour.

Findy. Found principally below the ghauts, it is straight, and of great stature, its branches are very regular; this tree appears a species, if not actually what is called the Poon, and is extremely well adapted for mats, it produces an oleaginous fruit, which when dry is made into a kind of candle much used.

Siripauly. Of great size, and in large quantities, its timber however is said not to be durable.

Cotapauly. A species of the former, its timber is soft and something like deal. Musical instruments are sometimes made from it.

Siripauli. Large, and straight, the bottom part entirely disengaged of branches, it is well adapted for

taste—it is durable and good for every kind of woodwork.

Uttee, (wild fig tree,) The fruit is tasteless, and the timber of no use.

Mootagudda. The seed is used in medicine, the flower has a yellow temporary dye, the leaves used by the natives to eat their food from.

Uingay, (*Ficus Ben galensis.*) A beautiful but useless tree.
Hugginu. Tolerable timber—species of the gum tree.

Nirkooku. An immense tree, with a rich foliage, only grows in the vicinity of rivulets—is useless as timber.

Comuty. A species of the Siripauly from which it differs but little.

Allighiunu. A species of the Poon adapted for masts.

Gayru or Cudju Nut Tree. The wild Gayru grows to an immense size but is of no use.

Honnay, (*Peterocarpus Santalinus.*) A beautiful tree, and valuable timber.

Mallingooly. Large, and good, timber.

Hooleengee. Small; its wood is of a reddish color.

Tuddachella. Cuddavaud. Woodee. Toopra. } Used as timber for the smaller houses, but principally as firewood.

Taygarlu, (*Tectonagrandis* or teak tree,) This valuable tree is by no means common throughout the whole extent of the country—it is seen along the eastern border, but of no superior quality, or size—it is scarcely ever to be met with in the lower districts, or along the sides of the ghauts.

Dindagua (*Adenanthera Punicea*) A Gum tree, large size.

Gubbis.	Small, the native of a poor soil; matches are made from its bark; stocks of guns, and ploughs from its wood.
Charuhonna.	Of large size; canoes are made from its trunk.
Bellasindy.	The wood furnishes strong beams which are used in the building of temples &c.
Cassurounnu.	Only to be met with below the ghauts; it is large and has a rich foliage. The fruit of this tree is globular as to shape, and about the size of an apple; it is of a most brilliant red color. To man it is poison; it is however readily eaten by cattle, and imparts an extremely bitter flavour to the milk of those cows which have fed on it.
Holuch, (Chuncoa Holivay.)	Its timber is used for building.
Beddikary and Pavu	Do. do. do.
Cumma.	Used as firewood. Wild honey is collected from its branches.
Tiosy (<i>Laureus Cassia</i>)	This tree is only met in the western parts of the lower districts. Toddy is extracted from it; the native of a poor soil, it is no where to be found above the ghauts.
Fruit trees	thrive very well, particularly the orange, citron, and lime, all of which are here found in great abundance, and of peculiar excellence.
Bamboo.	This reed, so generally and extensively useful, forms a large part of the forests. Some few remarks as to its physiology may perhaps not be unacceptable.
	This valuable plant grows in clumps, and is said to live for 60 or 80 years, it blossoms at the end of that period, and this state is known as the prelude to its dissolution, as the whole of the tree above ground subsequently withers and dies. The number of years to which the bamboo reaches is still questionable, as it does not seem yet known to what age the seedling will survive, and from this circumstance only

can the fact be known; the fixed residence of Europeans in India is perhaps not sufficiently long for any one individual to prove it by experience.

A curious fact in the history of this reed occurred a short time since in Wynnaad; the ryots in that country having petitioned the Collector for some remission of their assessments, owing to the losses they had sustained from an extended portion of the bamboo forest having gone to seed, (their subsequent decay causing a considerable loss to those who had the privilege of disposing of them) so general was this decay that in the month of March 1817 passing through this district in the course of 11 miles, there was scarcely a bamboo tree to be seen in the extensive forest, through which the road ran, that was not either dead, dying, or in blossom. Clumps of all ages and size contiguous to, though distinct from, each other, were in a similar situation; the smaller clumps here mentioned were supposed to be shoots, which had risen from the larger ones.

From the above circumstances it would appear that, however immature, the dissolution was not the less certain, and the fact would evidently lead to the conclusion, that the parent tree and its offspring die together; this opinion is held by some Botanists,* and is one that would appear verified in some measure from the circumstances above mentioned; adopting the idea, we shall not be surprised at whole forests of bamboo decaying at the same period. As a further illustration of what has been said, it may be observed that in 1800 several young bamboo cuttings separated from the root of the larger tree, were planted in the garden of a gentleman, and thrived luxuriantly, one of them blossomed in 1817, the experiment was again repeated in 1807, similar plants were put down and attained the usual size, 5 of them blossomed in 1816-17. It is conjectured that those shoots were separated from trees of different ages which died at the same period as their offspring. In the same garden with the above plants, were several bamboo trees which had been raised from seed in March 1817, they had attained their 14 years and were then in high health and vigour; part of those previous

* Mr. Knight.

experiments being only made on shoots, the proofs arising from them are not fully satisfactory, the observations that have been offered, however may tend to aid enquiry as to obtaining a more distinct information with regard to the physiology of this most useful reed.

The above catalogue presents but an imperfect list of the trees to be found in Codugu; it would not be difficult to enlarge it, but as it contains the names of the most remarkable, it was not conceived desirable to swell it by any further additions.

*Agrarams of Bra-
mins, Polliums, &c.* Bramins so powerful and numerous in the neighbouring countries, never appear to have had any influence in Codugu, where the ecclesiastical class is exceedingly small; there are here consequently none of the agrarams which in most Hindoo estates, the pious credulity of the Chief confers upon that sacred order of men; they are numerous however in the districts below the ghauts, but as ryots, enjoying no privilege whatever beyond the other castes, indeed, there is no Hierarchy of any kind, and though the Chief is of the Sivabucter tribe the religious institutions belonging to his faith are confined to a very small number, and those but poorly endowed; a few insignificant mattams in Yailsowra, one at Mahdeopoor, and another at Maddukayray are the only establishments of this nature.

Jaghiera. Estates held in Jaghier are numerous, but none of them reach to any great extent, it has been found impossible to learn such information regarding them as could enable their position and limits to be ascertained; it necessarily follows, that no minute details as to those particulars have been acquired; some general observations however will be found to have been made on them that may serve to convey some idea as to the tenure by which those possessions are held.

*'Punneeyas or Roy-
al farms.* Some portion of the revenues of the Codugu Prince arises from personal estates or royal domains (designated Punneeyas) dispersed almost over every part of the country, the extensive landed property of which he is thus immediate proprietor, is of considerable value, and provides for one great source of expenditure.

The same unwillingness to communicate any intelligence that has just been a subject of regret, operated in preventing any distinct knowledge being acquired as to the number and extent of those estates. The accompanying catalogue will be found to exhibit the names of those which have been actually ascertained; there is but little reason to doubt however that a considerable portion still remain unknown, but without specific information no opinion can be hazarded as to their total amount; it is said to extend to twenty or twenty-four; the list now presented only includes those with regard to the existence of which there is no doubt whatever. The Estates are named after the village in which they are situated.

1. Nunjarajputtun.....	In the Naad of that name, very large, and has an excellent garden in which is produced the best oranges in the country.
2. Kudgoadloo.....	
3. Hayrow.	In Kooyangerray Naad.
4. Hoodhoar.	
5. Sumpajee.	In Tawa Naad, small.
6. Currikay.	
7. Muddukayray.....	The Fort and fields in its vicinity.
8. Niddugunnie.....	In Muddukayary Naad.
9. Kuddumkul	In Sooleeay Talook.
10. Kautoor.	
11. Bylhully.	
12. Bellioor.	In the Poottoor Talook.
13. Bullaree.	
14. Buddugayray.....	In Hahlayray Naad.

The grounds in the immediate vicinity of the palaces in Hahlay-ray, Naku, and Gudday Naad, are also the personal estates of the Rajah.

The arrangement as to the management of these estates is not in all cases similar; they are however principally superintended by agents of the Chief,* stocked with his cattle, and tilled by his predial

* We find a considerable Revenue of the Rajah of Travancore drawn from personal estates, and this source of Revenue appears to have constituted a part of that, of all the petty chieftains throughout Malabar and Canara, and was known in Beduore.

servants of whom he has a very considerable number. On the inhabitants of the district in which they are situated, is imposed the obligation of assisting either personally, or with a certain number of their servants, for a specific period at the time when the business of the Punneeyá requires such additional aid.* The cultivation of these estates is conducted with great care, and the order in which the whole is preserved gives them something the appearance of English farms. On each are extensive offices and granaries kept with great neatness; the predial servants live in the vicinity, and an active Parputty maintains regularity, and secures industry; they have in many cases gardens and other plantations belonging to them, particularly cocoanuts, below the ghauts.

The Punneeyás are principally sown with rice, but sugarcane turmeric, ginger, saffron, and all kind of vegetables are grown on them. The produce of those estates chiefly goes to supply the household and maintain the numerous followers which the Chief supports; they are valuable as a revenue from their number and extent; their annual average produce in rice will be found stated in another place.

In some few instances the Punneeyás are occupied by ryots, who share equally the amount of their produce with the Prince—they being furnished by him with the implements and cattle necessary for the purpose of cultivation. This tenure (which does not hold with regard to those that have been mentioned) however is not so general as the system which has been just noticed, and it is only with some waste lands and inferior estates, that this mode of management is adopted.

These hills from the richness of their vegetation, the luxuriance of the forests, and the abundance of water with which the soil is supplied, would appear to point them out for pasturage; but neither the number, form, or size of the domesticated animals belonging to the country is such as would be expected from the above favorable circumstances; the length and violence of the rainy season however will in some measure account for the fact.

* Numerous feudal services of this nature are required from the Inhabitants, but I am not qualified to particularise all the instances.

Of domestic animals there are but few indeed, they may nearly be said to be limited to those of the cow and buffalo kind. The extreme violence of the rains destroys sheep of which there are consequently scarcely any; some few may be occasionally brought from Mysore, but the country is too hostile to their habits, to admit of their being bred within it; even the goat and are the native of every climate, and adapting themselves to every change of temperature, though hardy, can scarcely survive the rainy season, and are consequently rarely to be met with; hogs are amongst the short list of their domestic animals, they are reared for purposes of food, but are not in any considerable numbers. Poultry are reared in some quantity—There are no horses, except those belonging to the Rajah, as the few wretched ponies, that are to be met with scarcely deserve to be classed as such; were it not for the long duration of the rains Codugu would appear a favorable place for breeding them.

The same inattention to the amelioration of Kine. the breed of cattle almost universal throughout this part of India is here equally remarkable; the rural economy of the Hindoo seems not yet to have attained this point; no attempts are ever made at improvement; the males, not emasculated till a late period, mix with the cows and propagate the same or more degenerate progeny.

The climate is said to be prejudicial to cattle of the cow kind, particularly in the more hilly parts where the extreme severity of the rains destroy those not native to the place.

Although it may be said they are rather numerous, they are rarely if ever exported, and cannot be viewed as an object of traffic, altho' some few are occasionally sent to the districts below the ghauts, but never into Mysore from whence indeed a small number of the better kind may even be imported.

The cattle common within those hills are more diminutive, and every way inferior to those reared in the open country of Mysore, and would appear a medium breed between those, and the dwarfish race of the western coast; the inferiority must for the greatest part be ascribable to the heavy rains which deluge these hills for near-

ly a third of the year. Nunjarajputtan and Yailsowra are somewhat better situated in this particular, and have a more improved breed. The cattle of Codugu however in general never rise above mediocrity; they are of gentle habits; a brown or black colour predominates, they have but a small hump, and a short thick but not coarse form, they possess some strength and are well calculated for the light plough in use; this however is the only labor that they can be well applied to, as their size renders them quite unfit for carriage of almost any kind; they are housed at night where they get a supply of straw, but are in other instances not tended with any particular attention. The ordinary price of a pair of oxen is 16 or 18 Rupees; a cow sells for seven.

The cow kind below the ghauts has degenerated quite to a pigmy standard; they are meagre, wretched animals, unfit for the road, being quite useless as beasts of burthen, and apparently even ill calculated for the common business of husbandry; it requires only an ordinary share of exertion to improve their condition; much however as the Hindoos venerate those animals, they cannot be said to treat them with a degree of tenderness, and care, in proportion to their superstitions. The cattle of the upper country when exported to that below are said soon to degenerate in these districts; the violence of the heat during more than half the year destroys the herbage, and in consequence cattle of every description are with difficulty supported; they are sometimes during this season fed on straw, but more generally on leaves (of the Uttee or wild fig tree in particular) which when boiled are mixed with the husks of rice and given them. With so few good qualities to recommend them, their value, as may readily be imagined, is not considerable, a cow and calf of the best description is sold for 6 Rupees, and a working ox rarely costs much more.

The shade afforded by those jungles is favorable to rearing Buffaloes, and they consequently form a part of the stock of every cultivator; they are rather numerous in the more woody districts particularly in Kiggutt Naad, and generally in the southern parts, where the extensive uncultivated valleys, almost always in a marshy state, are quite congenial to the nature of those amphibious animals, they here attain a rather larva

size, and the female yields nearly double the quantity of milk given by the cow. The male is well calculated for the purposes of husbandry especially in those agricultural operations that take place in the rainy seasons; he is seen sometimes yoked with the bullock, but does more labour, and lives longer, his age reaching from 12 to 15 years, during the greatest part of which he is capable of working; his general value may be from 16 to 23 or 24 Rupees. The Buffalo of these parts is of the usual color; he is a large bulky clumsy animal with long annulated horns, lying generally on the back of his neck, he is timid, stubborn, and vicious, not well calculated for carriage, from his unwieldy shape, slow movement, and inability to bear any heat.

The Buffalo below the ghauts differs in few particulars from the description just given, he is however smaller and more puny.

The recesses of these deep and lofty forests give Wild animals. shelter to innumerable wild animals; indeed these woods in all probability contain a greater number than is to be found in any other part of the peninsula of similar extent; they appear like one immense menagerie, the inhabitants of which having deserted the neighbouring countries, here fixed their final abode; most of them however are familiarly known, and the few loose observations here made can add but little to the stock of Natural History.

Codugu seems particularly favorable to the increase of elephants, which are here equally abundant as in Ceylon, they are gregarious, keeping in droves from 15 to 30, even more, led by a principal who directs their movements: they inhabit indiscriminately all the woody parts, but particularly towards the eastern boundary, retreating into the thickest forests as the hot season advances; they are voracious, destroying plantations and crops, and it requires the utmost care and diligence to guard against their inroads; they frequently pass the Cauv   in large bodies (as they swim exceedingly well) and ravage the fields on its borders; they inhabit likewise the stately, and luxuriant forest, that covers the whole face of the ghauts, they are there very numerous, and frequently extend their depredations on the crops of the husbandmen as far as Punjee; when met in droves, they do not always attack the traveller (whose apprehensions however sel

dom allow him to proceed alone) but encountered singly the utmost danger is to be apprehended; these solitary ones are supposed to have been driven from the herd, to which they dare not return, and in consequence become furious in the highest degree; the mode of taking them in kyddas, or folds, as in Bengal, and Ceylon, is unknown, they are always caught in kups or pits dug to a considerable depth, covered with a slight stage to conceal them, and placed immediately across the paths which the elephants are in the habit of frequenting; much care is necessary to disguise the snare thus laid, as these sagacious animals are known to be particularly acute in detecting it. A number of elephants for the supply of the Mysore Rajah are yearly caught on the boundary of the two countries close to Hanagode; so numerous are they in Codugu, that they are taken in almost every part of it. In taking them no other mode is practiced than that which has just been mentioned. If young they are easily tamed, but when arrived at a more mature age, a year; and sometimes two are necessary.

The elephants of Codugu are divided into two classes, the Dodda Ras, or large, the gidda Ras or small kind; (this latter is not remarkable for being particularly diminutive) distinguished however by no other peculiarities. They are not so valuable as those imported from Ceylon, being inferior in size, and less capable of work; it has been frequently observed, that these animals are less robust, and smaller as they recede from the sea coast, the natives here however do not admit that those from below the ghauts are stronger or bulkier, than those which are found in the country above; their tusks are generally speaking not large; some however are of very considerable dimensions, but in most cases, they make no approach in point of size to those coming from Africa, and I am led to believe, they are not often destroyed for the sake of them. The elephants are all considered the property of the Chief, and few other persons are allowed to possess them; they are never bred, and but little could be learned with any degree of certainty as to the general age to which they arrive, or any of the minuter parts of their natural history; these points are now however too well ascertained to render the absence of any further information on them a matter of much regret.

Tigers.

Royal Tigers of the largest kind infest these woods in vast numbers, as also cheetas, and

leopards, less ferocious, and equally beautiful ; these animals do not here commit much mischief, as the abundance of game which they meet in their haunts prevents them from preying on men and cattle —the civit, toddy, and tiger cat, the ounce, or small panther, and other animals of the feline species, are to be met with.

Bears. Bears are very common ; they are large and always black, differing but little in size, and form from those of a colder climate ; their flesh is good, and though not an unusual dish in some countries, is not here eaten ; the bear is not carnivorous, feeding generally on white ants, wild honey, roots &c., his habits are comparatively gentle.

Wild Hogs of immense stature and strength abound, they are sometimes seen to attain the height of upwards of 3 feet.

The Sambre or Elk is still more numerous ; they keep in herds and are found in great numbers along the bare tops of the ghauts ; both these animals are greatly sought after by the natives, as they form the chief part of the animal food used by them ; they are remarkably expert in destroying them. The sambre, when from under the shelter of the woods, is timid, and difficult to be approached ; on such occasions the hunter covers himself with a blanket, and advancing on his hands and feet, approaches sufficiently near to shoot them. The red and spotted deer, also the antelope, are to be met with in equal abundance, but they generally inhabit the more open parts.

Kautee or wild Buffalo. Large herds of these animals every where abound throughout the thicker forests ; they would seem to bear a great resemblance to the Bison of naturalists. The kautee when very young is of a dark reddish hue, this however as he becomes older, gives way to the slate or ash colour of the domestic buffalo. The belly, legs, (as far as the knee joint,) breast and face, being however of a dirty whitish tinge ; unlike the former the whole body is covered with long hair, particularly the dew-lap.

* The wild and tame buffalo are evidently of the same species, varying only in those particulars, which are the results of their different modes of life ; the former is remarkable for his greater strength, ferocity, and activity. The figure of this formidable animal is as follows

and clumsy, the forehead is extremely elevated, his horns are short and thick at the base, but gradually become thinner, leaving the tips small and sharp. They are remarkable for the uniformity of their curvature. The neck is extremely large and depreased, the withers have no hump, but are very high, and gradually sloping off, give to the hinder parts the appearance of being disproportionately low, and comparatively weak.

Not venerated like the cow, the kautee is killed without hesitation by the Codugus; its flesh however is eaten only by the very lowest classes; its horns are sometimes polished, and kept as ornaments, and the skin when tanned is occasionally made into shields; the wild buffalo is found on the highest hills, and though his habits appear less amphibious than the domestic one, he seems to dislike the sun and only emerges from the woods in the cooler parts of the day.

Kaymay. The kaymay is sometimes called the wildgoat but approaches nearer, to the goat antelope; it is a beautiful little animal, smaller, and if possible, more delicately formed than the deer, from which it only materially differs in the formation of the head, and structure of the horns: the latter are, rather short, a little wreathed, and their roots for the first inch and a half are enveloped in hair; its cry something resembles that of the goat, and it doubtless has acquired for it the appellation it bears. It is killed by the natives, and is delicate meat.

Kennai or wild dog. Wild dogs are numerous throughout these hills, but it would not appear that they are peculiar to them; being known in Soanda and Bednore; they are also common amongst the Ramghur hills in Bengal, and met with in numbers along the banks of the Indus.

The kennais resemble the jackal, or rather something between it and the wolf, to which perhaps they make the nearest approach; they are larger, and more powerful, being remarkable for the strength of their jaws and neck, of a darker colour, and much more ferocious* than the former; their voice resembles something of the barking of a dog; they associate in packs from ten to twenty, and thus united they will attack any beast of the forest. They kill the tiger, and

are said to be great enemies of the feline species in general; they are represented as excessively swift, never failing to catch what they once give chase to. On coming up with the object of their pursuit they invariably seize the animal by the genitals, or head; in the latter instance, immediately destroying the eyes, thus having once fixed themselves, they maintain their position sucking the blood of their unfortunate victim, and never quitting their hold till he has fallen from pain, or fatigue. The sambre, and various species of deer, are the principal animals they prey on; they are gregarious, living in societies from which it is said not to be uncommon to expel such members as may become obnoxious to them—death would be the penalty of his again returning to the herd. They are not considered as dangerous to man, and are never destroyed by the natives. The kennai is represented as never thoroughly to be tamed, and as languishing under confinement.

It would require a zoological history fully to describe all the animals of which these woods are the retreat; the slight notices here given, cannot much enlarge the knowledge of nature. It will not however be required further to mention, particularly, the long list of those yet remaining to be noticed. The most remarkable in the catalogue are the ant-eater, sloth, a beautiful kind of squirrel with a large and bushy tail (eaten by the Codugus,) the ferret, mungoose, armadilla, and all species of monkeys comprehending a most numerous tribe (said also to be eaten by those mountaineers) divided into various classes; amongst them the lion-tailed is the most remarkable, also the large black one sacred to Rama.

Reptiles do not particularly abound, nor are they remarkably noxious; the large forest snake (the boa of naturalists) is said to be common, but has not been met with. The feathered tribe are equally numerous, and various; but as they consist mostly of those known in the neighbouring countries, a list of them will not be considered necessary.

Not conversant in natural history, the above enumeration is necessarily loose and imperfect; in making it many doubtless have escaped notice, but there are none of them which are not already familiarly known.

Remarkable buildings. It is a curious circumstance that throughout Codugu proper, there is but one building (Mahdeopoor Mattam) of at all an ancient date that merits the slightest observation; the absence of any, that has the least claim to extent, elegance, or solidity is remarkable; the numerous temples for religious purposes are small, mean, and mostly built of clay, nor in the few there may be of the better kind, are there any of those sculptures that adorn the commonest buildings dedicated to the Deity in the neighbouring countries.

In the district below the ghauts, the pagodas at Uddoor and Poottoor are the most remarkable, as being elevated and spacious buildings, they are kept in good repair, both exactly similar, and erected after the manner common in Canara; the pagoda is enclosed within a square raised two stories high, and is covered with copper; it has a double roof (the lower projecting beyond the upper one) and is of an oval form; the other buildings devoted to similar purposes are numerous, but small, not remarkable for any particular sanctity, and quite unworthy of notice.

Mahdeopoor Mattam. This is in the village of Jumboor N. E. of Muddukayray; it is the ancient cemetery of the

Codugu family, and is prettily situated on the bank of a fine stream, it but has no claims to architectural merit. This building is about 40 feet square, nearly the same height, and stands on an elevated base; it consists of two stories, the one at bottom is the place of sepulture, the tomb being enclosed by a smaller apartment within the larger; the one above is open, the same size as the under room just mentioned, and is surrounded by a low balustrade; a large figure of Busswa sculptured in black granite decorates the lower apartment; and the same image adorns the capital of four small pillars placed on the top of the building at the different angles.

Mausoleum at Muddukayray.

The most remarkable modern building is the mausoleum of Verajender the late Rajah; within its walls repose the remains of this once active spirit, and his Ranees or Queen. It was erected by him but a short time

before his death, destined to be the monument of his posterity, this shrine has been transformed into a religious temple, and Veerajender canonized as a saint, or rather enrolled amongst the gods, has become the chief divinity, and is worshipped by his former subjects—admiration of his undaunted courage, and the remembrance of the gallantry, and conduct, that delivered them from a fierce and unrelenting enemy appears to have triumphed over the recollection of the various atrocities that marked the close of his life; indeed, from the character of Veerajender we should be inclined to infer, that he owed this apotheosis more to the clinquant and imposing qualities of the warrior, than the less brilliant, but more useful virtues of the ruler. The anniversary of this fane is celebrated at the festival of the Sivaratre occurring generally in February, on this occasion a vast number of people collect to pay their worship to its deity, principally jungums; the extensive charity liberally dispensed in such instances may be supposed to quicken the zeal of those devotees.

The mausoleum is situated at the northern extremity of the petta, and enclosed by a high embankment; it is a square building, the length of the sides being about 50 feet, it is about 60 high and surmounted by a small neat dome, at the 4 angles rises a similar number of columns having the figure of a Busswa on each. The exterior is plain and neat; it is extremely well built, and kept with the utmost care and attention.

Palace.

The next remarkable building is the Palace;

a structure of recent date, being erected by the present Prince; it is within the fort, of which it occupies a large part. This edifice consists of two stories, is lofty and spacious, and like most Hindoo buildings of this nature, covers a great extent of area. It is of a square form having a small court in the centre; three of its sides present nearly a blank space varied only by a few apertures to admit the (air for they cannot be called windows). Considerable innovations however have been made in the architecture of the country with regard to the face of this structure, which is quite after the European fashion, presenting a very handsome front of about 110 feet long; a range of arches runs along the whole extent of the bottom part, the upper having a contiguous row of windows shut in by glass sashes and venetian blinds, a balustrade surmounting the whole. The front rooms are quite after the European manner, and visitors

are received in an apartment the architecture and furniture of which differ in nothing from an English one; as to the interior arrangements they are doubtless more consonant to native ideas of excellence and comfort. The whole however is an exceedingly stately fabric presenting something greatly superior to most Hindoo palaces, being received and executed, after a much better taste than those Royal residences generally are; it is of brick and altogether finished with equal solidity, as elegance.

The house for the reception of travellers is but a short distance from the Fort, and in the midst of a plantation of Orange trees, it owes its erection to the gratitude of the late Rajah, whose attachment to the English is so well known. It is a handsome building consisting of two stories; the form that of a centre with four turrets at the angles; it is in every way after the European model, both as to architecture, and furniture, nor has any thing been forgotten necessary to render it quite complete in those particulars; a regular establishment of servants is kept up expressly for it, and every care taken to anticipate the wants, and provide for the convenience of the traveller, who is treated with the most liberal hospitality.

The few buildings that have just been noticed are the only ones at all deserving remark.

Mines, Minerals, Manufactures. Mines are generally found in hilly countries, as such, Codugu it is probable contains some, a

knowledge of which might perhaps reward the search of the curious, at present its minerals lie undisturbed in the bosom of the mountains that give them birth, their contents are unknown; it may be observed however that it is in those of a barren and sterile nature, that they are to be looked for, with greater certainty of success. All the metal utensils requisite for domestic or agricultural purposes are imported, and the inhabitants deny the existence of any mines, but such an assurance would deserve little credit, as, if they thought it was their interest to conceal them, no nice regard to truth could be expected. The soil however has not been observed to contain metallic particles, nor have any other circumstances that would indicate them been perceived. However questionable the existence of mines may be, there is every reason to believe none are worked.

Manufactures.

No town in Codugu can be said to be the seat of any manufacture, the feelings and habits of the aborigines quite unfit them for inert and sedentary pursuits; manufacturing industry has made no progress amongst any part of the population. The labours of the inhabitants are directed to the business of agriculture, and they exchange the products of their soil for the manufactures of their neighbours.

Soil of the high grounds in Codugu proper.

From the situation and nature of the country a great variety in its soil necessarily will be inferred.

Trees indicating in some measure the nature, and quality of the soil on which they grow, that of Codugu proper covered by one continued forest must be considered of singular fertility; the soil of most of the low hills, and slopes is of a reddish firm earth with a slight gravelly mixture (occasionally a little stony) the luxuriant foliage and stature of the trees they produce is a sufficient assurance of their fecundity.

Of the large hills.

The large hills including the ridge forming the summits of the ghauts, the Brumagerray mountains, Cotay Betta and a few others are not so fortunate in this particular. Ascending from their foot, the soil becomes gradually more meagre, rough and stony as the top is approached, the summits of the greater part of these hills are devoid of wood, though not destitute of verdure, as a luxuriant pasture (the resort of numberless wild animals) succeeds to the deep woods that encompass their base. The soil of these hills can in no place be called rocky, blocks of coarse granite are occasionally to be met with on them, but those immense tables of brick or indurated stone that forms so great an ingredient in the composition of the ghauts of the more northern parts, particularly those of Soanda, do not enter into the formation of that portion of them coming within this territory.

Of the high grounds in Yailsowra.

The soil of the higher grounds of Yailsowra consists of a thin stratum of gravelly earth, barren and arid, producing only a few dwarfish shrubs, and a tall thin grass.

The western face of the ghauta. Descending westward from the summit of these mountains, the soil undergoes some change, becoming of a darker hue and rather more permeable, it is highly fertile, nourishing a forest of immense stature. The stratum of earth is everywhere deep, and continues so without intermission to the foot of these hills.*

Soil of the valleys in Codugu proper. The soil of the valleys in the upper country in Codugu proper is liable to some varieties, that, of the northern and western parts of Codugu proper is a rich dark reddish clay quite devoid of any stony mixture, and remarkable for its powers of production; that of the more southern parts, particularly the Kigguttinaad talook, is of a darker color, sometimes approaching to black, having a slight mixture of sand, and nearly as remarkable for the force, and activity of its vegetation. The singular fecundity for which these parts are remarkable, may in some measure be attributed to the variety of rich vegetable matter, brought down by the torrents from the high grounds in the vicinity of the cultivated lands; to this annual supply may be added their situation, which, generally enclosed in the midst of thick forests, are partially shaded by the trees which fringe their borders, which produce a temperature, and retain a moisture, eminently favorable to vegetation; the abundance of water consequent to a mountainous country producing a constant humidity, the lands retain their fertility undiminished, and crops are seldom known to fail.

In Yailsowra, and Nunjavipputtan. The cultivated lands of Yailsowra possess none of the fertility which characterizes that of the interior, the little barren slopes that border them are incapable of supporting any vegetable substance that could invigorate their soil, which is comparatively superficial and poor, when contrasted with that of the more woody districts; it partakes however, in common with the neighbouring country of Mysore of an ordinary share of fertility.

The above character is, in a great measure, applicable to Nun-

* There are no appearance of marine productions in the soil of the ghauta, nor indeed, in any part of the lower districts, that has come under my observation.

arajputtun : towards this part of the eastern boundary, the luxuriance of the forest gradually ceases, and leaves this district champaign. The soil consists generally of a light friable earth, the aspect is similar to that of Mysore, and it is only calculated to produce the dry grain common to that country.

Soil below the ghauts. The soil below the ghauts is greatly diversified, but as a general character is infinitely less fertile, and more superficial than that of the upper country.

Of the high grounds. Quitting the foot of the ghauts and advancing westward, the deep stratum of earth that covered their sides gives way to the lighter and more stony soil of Sooleeay. The high grounds in these districts have a great mixture of the brick stone rock in their composition (it occasionally appearing in large naked masses) and are everywhere covered with but a thin stratum of earth ; the forests of those districts though thick, want the stature and luxuriance of the woods of Codugu proper, they chiefly consist of trees, the native of a meagre soil. Leaving Sooleeay and approaching the sea these woods become still scantier, and the trees and shrubs dwarfish, and stunted ; the high swelling slopes assume the form of an elevated table whose surface presents nothing, but one vast sheet of brick stone rock, mostly destitute of soil, except the little that occupies the small crevices of it ; this thin coat is rarely of sufficient depth to mature trees of any size.

Of the valleys. The soil of the valleys resemble that of the more elevated parts, but is more rich, and loamy ; that of the rice lands throughout the whole of the lower districts is remarked as decreasing in fertility as it recedes from the sea, the more western parts are consequently the best ; the soil of the cultivated valleys of Poottoor is a light reddish colored earth of some depth, having however a substratum of the laterite, that of the valleys of Sooleeay is more superficial and permeable, it is however favorable for the growth of arreca plantations.

Crops above the ghauts. In Codugu proper, rice is yielded in such lavish abundance by the first crop grown during the periodical rains, as generally speaking, to render a

second quite unnecessary, particular spots being favorable to artificial irrigation may occasionally be cultivated a second time, but this is by no means common, and the instances are too few to render a particular exception necessary.

In Yailsowra. In Yailsowra the narrow valleys in which the cultivation is formed are terraced to a considerable extent to admit of its being more enlarged; but it is the lower parts only that have a sufficient supply of water to admit of a second crop, which is always limited in extent, and scanty in produce.

Crops below the ghauts. The whole of the rice lands below the ghauts yield two crops in the year, and sometimes even three; the steeps by which they are enclosed affording abundance of water for irrigation, the second crop of rice is not unfrequently followed by one of tobacco, dry grain, or some of the various leguminous plants common here.

Return in fold. Circumstances would not admit of obtaining all those minute particulars, and statements, from which conclusive deduction could be drawn, as to the average return in fold, throughout the country. The observations, that have been made however enable it to be stated with confidence, that in most parts of Codugu proper (particularly the most woody) the general increase may be from 40 to 60 fold, and in extraordinary seasons, the average may approach much nearer a hundred; it would be difficult to imagine a more abundant return, or more highly favored soil.* In Yailsowra they generally reap on the best lands only from 20 to 25 fold, and from 15 to 20 on the betta fields. In Poottoor and about the most western parts, the quality of the ground sometimes varies, but the average (on the first sort of land) scarcely ever exceeds

* It is stated by Colonel Mahony (sometime resident in Codugu) that "an ordinary soil is said to make a return of 50 fold, increasing it as it improves, it reaches to the amount of a 100 in which latter description the country abounds." I am inclined to believe that this return is much overated. Malabar only yields from 10 to 30. The best arable land in England gives from 10 to 30. Scotland only from 10 to 15. The remarkable fertility of Egypt does not often exceed 50 fold.

COTUGU SUMMIT.

25 or 28; approaching the ghants it gradually becomes more scanty; and in Umr and Soolecay it only re-pays the labor of cultivation by a return on the best lands of from 10 to 12, and often still less.

The chief product of both the upper and lower country is rice; yielded in superfluity it is the principal export, particularly from Codugu proper.

Though well fitted from the soil of the higher grounds, (which has sufficient depth, and not too great a declivity to admit of cultivation) there is in the upper country, but a comparatively small portion of dry grain produced. Raggy so well adapted to the hilly country from the easiness of its culture, is grown only in comparatively small quantities amongst these mountains; tobacco, nuts, ellu and yerrinda (*Palma Christi*) plants cultivated for the purpose of making oil, some little huruli (or horse gram) are grown not however in sufficient abundance to prevent the necessity of importation.

Yailsowra principally produces rice; in it however, and Nunjarajputtun, are grown all the dry grains common to Mysore, (wheat is said to be produced in small quantities, but I have never met any) but by no means sufficient to supply the interior. The best tobacco comes from those districts, that of the more woody parts has the character of being indifferent. Yailsowra also produces a very little sugar-cane. Hemp may be added to the products of the upper country, but it is only grown on the worst soil, and in very small quantities.

Vegetable productions are grown in great variety and abundance, the upper country appears particularly favorable to the productions of esculent plants, also fruits, flowers, shrubs, and garden stuffs of every kind, indeed, the temperature and soil of the higher parts, seems well adapted to mature those of a colder climate. Of the fruits, the most remarkable are oranges of different descriptions, all of an excellent quality, they are exceedingly common, as are also limes of various species, citron of an immense size,

pine apples,* pomegranates, pumplemose, jack, plantains, all in abundance, and of a most luxuriant growth; the other fruits common in this part of India are in profusion, and of a good quality. Turmeric, ginger, a little mustard, and the numerous other kind of condiments used by the natives are also found. Peas, cabbage, potatoes and other European vegetables thrive well, but are not in common use. The betel vine is found in the vicinity of all the ryots houses, the leaf however, is said to be comparatively coarse, much is imported.

Of the forests. Sandalwood and cardamoms are the most valuable of the spontaneous productions; a more particular account of these articles will be subsequently given, exclusive of them the jungle yields excellent timber, a species of wild nutmeg of good quality, the wild olive, cassia,† gum trees in abundance, wild yams of great size, quantities of wild honey are found, the wax of which belongs to the Circar, and is of some value, the bees producing it are of several species.

The products of these forests extend to a much larger list than is here given, it would however require a long residence amongst them to enumerate them with precision.

* They may be said to grow almost in a wild state, the plants merely requiring to be placed in the ground, and thriving without much further attention, they renew themselves by a succession of fresh shoots, given out from the older ones, as they decay, they soon acquire new roots, and a bed of those plants has been known to multiply, and furnish fruit regularly during a period of 18 years; they thrive but in rather elevated and dry situations—those grown in Codugu are large, but loosening the ground immediately at the root would increase their natural luxuriance; some of the plants have been known to attain 6 feet in height, a stature every way favorable to the excellence of the fruit.

† The Cassia Lignia or *Laurus*, *Cassia* is very common throughout the upper country, though made but little, if any use of; the process by which this article is fitted for sale, seems not generally known, or it must have long since been numbered amongst the exports. It is sometimes thus prepared in the neighbouring countries:—the plants when a year old are pruned till only the lower part of the tree remains, fresh shoots spring from the stump which are removed (when they attain the age of 3 years) at the season when the sap has ascended to the summit, the bark is stripped off when they are pliant, and the exterior surface carefully scraped, it is then formed into long rolls and exposed till quite dry to the influence of the sun; these operations may be repeated twice a year, that is in July and February the most favorable time for taking the bark.

Below the ghauts. In these districts, next to rice, suparee is the principal production. Plantations of it are numerous in Pungee, and parts of Sooleeay and Bullaree; the upper country is entirely supplied with this article from below the ghauts from which is also sent a small quantity of khut (*Terra Japonica*) rice is principally sent to Mangalore. Raggy is cultivated on the hills in Sooleeay to some extent, bearing however no proportion to the quantity of rice grown; tobacco, hurali, some hemp, yerrinda and various kind of pulse are grown on the rice lands, after the second crop has been taken from them; neither vegetables, or fruits are so good, or in such quantities as in the upper country; of the more precious articles pepper is the chief, if indeed, not the principal one; it is found towards the foot of the ghaut that skirt the Sooleeay district; it is also cultivated in the arreca gardens, amongst the products of which betel nut may likewise be reckoned as a principal one. The cocoanut so extremely useful in all its parts is very general throughout the country situated below the ghauts, sugar-cane is also cultivated there, but the quantity of jaggery made is not considerable.

The above enumeration comprises the most prominent productions of its soil, the account given of its manufactures will show, that those of its industry may be contained in a much more limited catalogue.

Agriculture. The agriculture of Codugu as will readily be supposed is much in the same state as that common throughout most parts of India, a system of rural economy formed at a remote period has been transmitted for ages unchanged, and the cultivator, attached to ancient practices, views with dislike any attempts to innovations.

But an imperfect sketch can here be offered of the agriculture of Codugu. The subject though not connected with anything calculated to excite apprehension, shared nearly the same fate as all others. The infant stage of its advancement however renders it perhaps of but little value as a lesson of experience, though a knowledge of it may be desirable as a statement of facts.

Of the upper country. The industry of the inhabitants of the upper country, is directed almost exclusively to the cultivation of rice, it is grown only in the low narrow valleys that intervene between the high grounds and which appear every way well calculated for its production.

Lands. These valleys are generally from $\frac{1}{4}$ to $\frac{1}{2}$ a mile in breadth in the wider parts, becoming however, exceedingly narrow as they run amongst the higher grounds, they are terraced with industry, and their area is always sufficiently large to admit of ploughs being used. The lands into which these valleys are formed are known under two denominations.

First Bylgudday. This is understood as the lowest part of the valley which at most seasons retains some humidity, being occupied by springs, or having a rivulet running through it.

Second Makigudday The fields known under this term are those terraced up the sides of the neighbouring slopes, they depend solely on the supply of rain during the wet season for the success of the crops grown on them, the former is capable from its position of being assisted by artifical irrigation.

Though the upper county throughout produces rice in the utmost luxuriance, the more central parts may be considered as yielding the most abundant crops, the plants here attaining the greatest size and substance; towards the north the quantity of rain that falls is said to be too great in the southern districts, though the valleys are larger, and more level, the soil is comparatively of an inferior quality.

Ploughing. Husbandry as practised amongst these hills is by no means operose or intricate, the first operation of it which is termed "Hoanara" begins in Yeddimar when the ploughing commences, the extreme inefficiency of the instruments which enter scarcely beyond the surface, renders a frequent repetition of the operation necessary, so that the fields generally receive from 6 to 7 ploughings before the soil has been sufficiently prepared. The first 3 of these take place when the ground is in a dry state, the

remainder after a considerable portion of rain is fallen, and when they are dissolved into a soft muddy consistency, no particular period, is considered necessary to intervene between the various ploughings, which are made according to the state of the weather and convenience of the cultivator. The whole operation of ploughing being over, the field is smoothed once or twice with the pala when it is prepared for the reception of the plants.

Manure.

The amelioration of the soil seems to be an object of some solicitude. Manure is carefully collected, and distributed; it consists principally of all the excrementitious matter of the domestic animals absorbed by the straw and dry leaves with which they are littered, to this is added the soil, and refuse of the house; and indeed, scarce any kind of manure seems to be objectionable. Cattle are confined during the night, and the very hot parts of the day in temporary folds on the lands for the purpose of enriching the soil. In some parts of the lower districts, particularly those occupying the base of the ghauts, the ear of the grain is alone removed leaving the whole of the straw* as stubble, partly for the food of the cattle and partly as manure. The manure is incorporated with the soil in the first and second ploughing, being previously spread in small heaps, over the field; when composed of a mixture of dry branches and leaves, it is burnt on the lands, and the ashes thus procured distributed equally over them.

There are three kinds† of rice cultivated. Doda

Species of rice. betta, this is a large grain, and it is that in gene-

* It is a curious circumstance that the houses below the ghauts are never thatched with straw being always covered by the long grass growing in great abundance on the higher grounds.

† It has been an object of enquiry amongst the curious to learn from whence originated the various grains, and if they are now seen in a wild state. This latter question would seem in some measure answered by the circumstance of wild rice being common in some parts of Codugu. In Kiggutnaad many of the smaller valleys are perfect swamp of considerable depth, the texture of the ground is too much broken to admit of the plough, and the general testimony of the Natives would lead to the belief that they never had been cultivated; in the midst of the rank herbage, that covers these swamps small crops of wild rice is frequently seen, the stocks are high, but excessively thin, and the grain very diminutive; the ear is bearded like the barley; when boiled it is of a rather bluish tinge, and not marked by any particular flavour. It is called paundawar butta or the rice of paundoo, and only eaten by the very lowest classes.

ral use with the majority of the inhabitants, and what is principally exported. Dunna betta a small and finer kind; and kissara a red species are also shown, but both in very small quantities.

Sowing. The whole of the rice ground in the upper country is transplanted, but the management anterior to this process, that is rearing the seedlings is as follows:—by legudday fields are chosen for the reception of the seed, their preparation is after the manner as stated above with but little difference, a greater portion of manure, however, being generally allowed. The sowing commences in 'Caudear' or as near that period as the state of the weather will permit, but the season of sowing influenced by circumstances, sometimes extends to a month longer. The seed is of course sown broad cast and very thick; it is prepared by being steeped in water for a short time, and then placed in a heap, it is kept damp for three days; when beginning to vegetate it is prepared for sowing. The fields being now in a muddy state, it sinks for a short way into the soil which is only kept sufficiently moist, water being but scantily supplied till it has taken root, when the quantity is gradually increased, the seedling sown germinates, and at the end of 35 or 40 days it attains nearly a foot in height and is then fit for transplantation.

Naty or transplantation. The period of transplantation begins in 'Audry' and ends in 'Kuckayray.' On the removal of the seedlings they are transplanted over the whole space intended for the cultivation of rice, this mode is considered as best adapted to resist the violence of the rain and in other points of view is reckoned to have advantages, and seems particularly calculated for a rich soil. The transplantation is managed with great care, 6 or 7 stocks connected together from one plant—these plants are arranged in regular lines and have a space of about 6 inches between the roots of each, this admits the air, and heat, and gives them full room for all the luxuriance of vegetation. The holes in which they are placed are readily made with the finger in the damp earth, and the roots soon become settled; grounds thus planted are found to produce com-

paratively few weeds, and what there are, can be easily removed. Immediately after transplantation, the field (for a short time only being kept damp) is inundated, and continued overflowed with from 6 to 7 inches of water till within 8 or 10 days before harvest, the plant during this time being in a state of semi-immersion.

The fields undergo only one weeding; this takes Weeding. place generally six weeks after transplantation; an abundant supply of water retards their growth they are removed by manual labour. The crops generally are not liable to miscarriage or sickliness; in the early part of their growth they are subject to the attacks of several species of worms, to extirpate which all the powers of charms and spells are called into action, but are not always found of sufficient efficacy. They are also open to the depredation of mountain mice, and attract flocks of graminivorous birds; both these evils however are readily guarded against.

This is termed Beullay, the crop of rice sown here generally takes full 5 months before arriving at maturity. Harvest. It ripens in the more open parts at the commencement of December, perhaps a short time sooner, but in the deep and sheltered valleys, not till the end of that month, or till the beginning of January; when cut, it remains two or three days on the field to dry, and is then trodden out of the ear by bullocks. The grain intended for seed is carefully preserved, that for consumption after having been boiled (which facilitates their removal) the husks are beaten off, the rice is kept in large baskets having the exterior covered with a coating made of a mixture of cow-dung and mud; the crop is reaped with the ordinary sickle.

The straw answers numerous domestic purposes, thatching, food for the cattle, &c. It grows to a great height, generally reaching 4 feet.

Cultivation of Yailsowra. The cultivation of Yailsowra differs but in few particulars from what has just been stated. Transplanting is not generally practiced, the seed is sown broad cast in most instances. The Coorg is however also

used. In this latter case, the fields are always ploughed in a dry state, and the seed sown on them requires no preparation. The pala closely following the drill, covers the seed as it falls from it.

Of Nunjarajaputtun. Nunjarajaputtun is the small district lying along the western banks of the Cauvery, it is the only part that produces any abundance of dry grain. In it are cultivated those common in the open country ; raggy, auvaray, tovaray, udu, huruli, and ellu &c. The ordinary management observed in rearing these grains differs in nothing from the process common in Mysore, which is so well known as not here to require a repetition of it.

The Hills are subject to coomary cultivation, of however no very considerable extent. Raggy is the only grain sown on them, this cultivation is performed by the lowest castes generally the periodical servants of the aborigines, who themselves never assist in it, their labors being exclusively confined to the lower grounds. The course of management observed in this species of husbandry is subject to few variations ; the detail of it will not here require any particular mention, it exactly resembles that prevailing below the ghauts.

Cultivation below the ghauts. The lands of the lower district on which rice is cultivated are divided into three kinds :—

FIRST BYLOO.—This is the lowest part of the valley and capable of being artificially irrigated, they are the most valuable, yielding two and frequently three crops during the year ; they form a considerable portion of the cultivated lands.

SECOND MAJULA.—The fields thus denominated are situated higher up than the former, are capable of being partially irrigated in the event of a failure of the annual supply of rain, but not to the extent of producing two crops—one, if the wet season be at all favorable, is looked on as certain.

THIRD BETTA.—Are situated on the higher parts of the slope connected with the lands just mentioned, the success of the crops

sown on them is very precarious as they are not capable of being in any way assisted by artificial irrigation.

In the country below the ghauts, from 7 to 9 ploughings are necessary, the period for their commencement and close, is fixed within rather wide limits, depending on the season, and nature of the intended crop ; the operations of husbandry however may be said to commence by the 15th of Puggoo (latter end of April) and end at the close of Baysha (15th June) the first and second ploughing but imperfectly opens the ground ; no particular period is allowed to pass between the different repetitions of this operation, it being regulated by accident, the nature of the weather, &c. At the close of the third ploughing the banks of the fields are rendered capable of retaining the water ; and after the fourth and fifth arotion it is soft and muddy ; it is again twice ploughed, and carefully smoothed by the pala, (or plank) after this it is again inundated, and the water being allowed to remain a short time, it receives the last ploughing and is finally smoothed by the above instrument. The preparation of the majula differs in few particulars from the above, the labor only being somewhat more operose. The betta or highest fields are managed after a similar manner, the first three ploughings are in a dry state, and as the season is favorable they receive in succession six further ones, the operation of smoothing them taking place nearly as often.

Manure. Every kind is collected, the cattle are littered every evening with fresh leaves which are removed every 15 or 20 days, this is further increased by the soil of the house. Bushes and dry leaves of every kind are collected, and burnt on the fields.

Sowing. The seed is in general sown broad cast, transplantation is however sometimes adopted for the byloo and majula lands, but the betta fields requiring to be sooner sown, are unfit for this species of cultivation ; the preparation of the seed sown for transplanting differs in but few instances, it is mixed with a portion of cow-dung and water, and left for three days to vegetate, being kept for this time always in a damp state ; the byloo land is generally chosen to rear the seedlings, it is sown broad cast, and exceedingly

thick, the field is inundated, but the water drawn off at intervals to promote vegetation, but as the plants grow up they are always kept a third part covered with it; they are capable of being transplanted after the 30th or 40th day; this mode on the whole is considered expensive and laborious, and is only practiced where the number of labourers are numerous. When the fields are sown broad cast, the seed is prepared in the manner similar to that just mentioned, except when their positions are particularly swampy; thus situated the seed is sown dry. Seed intended for transplantation is generally sown by the 20th of Baysha and transplanted by the 10th or 20th of Catiallu.

Weeding. Takes place in the month of Attee, it is an expensive operation, and not often repeated, a scarcity of water never fails to produce a great number of them, (weeds) they do not grow to any considerable size, a species of creeper of the grass kind is most destructive and troublesome.

Crops. It may be generally said that more than $\frac{2}{3}$ of the fields below the ghauts yield two crops in the season; the majula, though not the whole of it, gives one of paddy, and another of dry grain: the byloogudday two of rice, the last crop is greatly inferior to the first.

Harvest. Harvest is here considerably earlier than above the ghauts. It generally takes place about the latter end of October.

Coonaray cultivation. A considerable portion of the hills of the lower districts are subject to this cultivation, it is mostly practiced by the lower Mahratta castes, some hill rice is also grown by them; the preparation of the ground in both instances is something similar. This species of cultivation (raggy) though not immediately confined to these districts is more common in them than the country above, this arises more from the nature of the inhabitants than the soil of the hills, which is extremely well adapted to it.

Hill rice. The soil favorable to this culture is a reddish mould with a small mixture of pebbles; the declivity of the hill must not be great, as in such a case the violent rains here would wash away the earth. Those hills covered with a thick forest of ancient growth are unfavorable, a jungle of moderate density, and if 13 or 14 years old, unites every desirable requisite.

The agricultural operations of this part of rural economy are few and simple: a favorable spot is fixed on, the jungle is cut between Durmiar and Malliar, and burnt in Coombiar, it is surrounded by a strong hedge, and the business of sowing commences in Yeddimiar, this is done broad cast, after which the surface is superficially dug up by the kokay, it undergoes two slight weedings during the three succeeding months, it ripens about the sixth, and is cut in kunniar. A second crop is rarely sown the following year when however, ellu, huruli, tovaray, &c, are grown in its place, the latter is frequently scattered throughout the rice crop, and occasionally sown in a straight line to answer the purpose of a boundary between the fields of different possessors. Hill rice gives a return of about 10 fold, the grain is small and of a reddish color.

This cultivation is precarious, and the husbandman cannot look with confidence to the re-payment of his labor.

Raggy. The preparation for the raggy or natchenny cultivation, as has been said is similar with the former, and differs but little as to the situation or soil required. A period of from 7 to 12 years is allowed to elapse generally before ground once cultivated, again becomes useful; such a long one would seem unnecessary, but the natives conceive a large quantity of wood must be burnt to produce fertility: its return in fold, in favorable seasons, may be from two to three hundred. It may be remarked that raggy in this country is more a subsidiary cultivation than one exclusively followed. It is in no instance the general food of any part of the inhabitants.

Areca plantations. The culture of the areca nut forms an important part of the husbandry below the ghauts. This beautiful and useful palm will not thrive in the upper

country; no very detailed account will be required, as to the formation and management of the areca plantations, the gardens are only made in the hilly grounds (the small sheltered glens of which they occupy); they require a red and rather gravelly soil, any change in this particular affecting sensibly the quality of the nut; a constant supply of water is one of the first requisites in the formation of the areca garden. This palm begins to bear about the 9th or 10th year, and continues to yield fruit for sometimes 40 years. The harvest occurs in November; pepper is grown in all the areca plantations in which are also a number of fruit trees.

Character of the cultivation, obstacles, &c.

It will be seen that the general system together with the minutiae it embraces, is not dissimilar from the common course observed in the neighbouring countries; those prejudices in favor of old habits, and that aversion to innovation of any kind which forms so remarkable a feature in the character of the Hindoo, have here lost none of their force, but continue to present an effectual resistance to all improvements, which science or experience might suggest, and are the chief obstacles which agriculture has to encounter. Weak and inefficient instruments of husbandry, want of wheel carriage, and the numberless wild animals to whose attacks the crops are liable, are impediments of minor consideration. The want of capital must necessarily retard the progress of improvement, but above all, that contented indolence and apathy which renders it the first aim of the Farmer, (and few Indian ones aspire beyond it) to secure a subsistence, rather than a competence, necessarily opposes the introduction of any change from the old routine, as that sanctioned by the experience of their forefathers is found capable of supplying their few wants.

Though the course of management adopted is prescribed by prejudice, yet, when the rudeness of the implements are considered, it is a subject of wonder that the cultivation is not more imperfect.

The rich qualities of their lands, for whose valuable properties however, they are entirely indebted to nature, recompenses for the imperfections of their system of agriculture. It must not be inferred how-

ever that the Codugu farmer exhibits any remarkable want of skill in this particular, he is by no means inferior to his neighbours and possessing an equal if not greater share of industry, he derives considerable advantages from his central situation; living in the midst of his fields, he is able to bestow on them, a more careful attention and superintendence, than the husbandmen of the open country, who, residing in villages, has frequently to go some distance to his lands.

The general system observed would doubtless admit of great amelioration, the fertility of the arable lands below the ghauts is dissipated by constant tillage; one crop is scarcely taken off, before another is sown, and though the lands of the upper country are not subject to a similar course of exhaustion, better means than those adopted could be pursued to augment their fertility (already great) and call it more effectually into action. The benefits of fallow are unknown, and consequently this is never practised, no variety of crop (in Codugu proper) is grown on the cultivated lands, nor indeed, is the climate or soil well adapted to any other than rice.

The agriculture of Codugu, and it may be said that of the lower districts extends to no variety of production; rice is the staple one, of which much more is grown, than can be consumed: the low lands of Codugu proper yield as has been observed no other article; they seem unfavorable to the growth of sugar-cane, which is not often met with; this is produced in Yailsowra, but the cultivation of it is limited, it is more extensive below the ghauts, but even there is not grown upon a large scale. Tobacco is grown in the upper country for domestic use, and is inferior to that of Mysore; below the ghauts it is in great abundance, and some of it is exported. This plant is sown in small beds richly manured, it is subsequently transplanted, and requires some care; it is grown always on the low slopes close to the houses of the ryots; a little Shanapu, or hemp is also grown, principally for its fibres, from which ropes are manufactured, but the natives are said to have the pernicious habit of eating its leaves, remarkable for their intoxicating quality. A small quantity of wheat is said to be grown in the more open parts. The fruits common to the country have already been mentioned, and there is every appearance of probability, that many of those of Europe might be introduced with success; all idea of experiments however

is foreign to a native. Ginger, and turmeric require a rich soil, and much care, the culture of them is limited. All cucurbitaceous plants thrive with uncommon luxuriance ; as to medicinal or vulnerary herbs, none of any particular merit have come within my observation. It will not be necessary to enumerate the various other vegetable productions commonly known, they are the same as those general throughout the surrounding countries, being however of a larger growth.

The agricultural instruments common in Co-dugu are exceedingly few, and those of the rudest kind.

Agricultural Instruments.

From the make of the plough it will be seen that it is but ill calculated for the office to which it is applied, and to its extreme inefficiency must be attributed the necessity that exists of so frequently repeating the operation which it performs. One person only attends a plough, the bullocks draw double, and are coupled by a yoke on which the beam rests, and to which it is fastened by a cord. The harness, yoke, &c., are all equally wretched with the instrument itself, whose extreme cost does not exceed one Rupee ; the value of the oxen attached to it however may reach to that of 5 Pagodas.

The tahway or pallay is generally an ordinary plank in which iron staples are fixed, two cords fastened in them, connected with the yoke by which the oxen are coupled, complete this rude instrument ; it is made to answer all the purposes of the harrow. The driver standing on it adds to the efficacy of the operation, and after repeatedly passing over the surface it is enabled to pulverize, and smooth the lands.

The Codugus have no farming utensils peculiar to themselves ; the goodalee or hoe, also the cutty or sickle common in the neighbouring countries are in general use here, the former performs all the offices of the spade ; the latter equally answering a variety of purposes.

Carts of any description are unknown in Codugu. Baskets are used when it is required to transport earth, or manure from one place to another.

The primitive and wretched state in which we find the agricultural instruments is perhaps more attributable to the rude simplicity which characterizes the Hindoo, than any inability or want of means to improve them.

register of the Villages in the Codugu Survey, showing the particular Bearing and Distances of each from the nearest Trigonometrical Station.

Hobely or Naad.	VILLAGE NAMES.	Trigonometri- cal point from which ob- served.	Bearings.			Miles.	Furlongs.	Yards.
	YAILSOWRA TALOOK, CONTAINS 12 HOBELYS.							
Coadley	Hobely ...							
Coodooloor	do ...							
Hoolacode	do ...							
Bembulloor	do ...							
Bulla	do ...							
Cunnagaul	do ...							
Hanugoad	do ...							
Deadhully Gowdhully								
	Hobely ...							
Nerrootod	do ...							
Menesedda	do ...							
Mooloor	do ...							
Gunmagoor	do ...							
Humpapoora	... Maullimby.	N. W.	8	52	11	3	192	
Santapoora	... do.	"	13	0	10	6	160	
Kella Coadley	... do.	"	4	52	10	6	190	
Dood Coadley	... do.	"	5	45	10	4	0	
Arrakunhully	... do.	"	9	15	10	3	0	
Kussoor	... do.	"	13	30	10	3	0	
Hosohully	... do.	"	13	30	10	0	20	
Kulhully	... do.	"	13	15	9	4	55	
Mullypoora	... do.	"	154	52	9	3	0	
Kirra Coadley	... do.	N.	0	0	9	1	110	
Kirugunhully	... do.	N. W.	5	0	9	1	110	
Nandypoora	... do.	"	8	22	9	0	38	
Mulhully	... do.	"	5	45	8	3	7	
Kathay	... do.	"	13	30	8	5	107	
Ichillapoora	... do.	"	9	45	8	6	55	
Oorgooty	... do.	"	14	30	7	5	55	
Raminhully	... do.	"	3	37	8	5	110	

Hobely or Naad.	VILLAGE NAMES.	Trigonometri- cal point from which ob- served.	Bearings.				Miles.	Furlongs.
				N. E.	30	9		
Hobely.	Coodooloor	Maullimby.	N. E.	9	30	9	0	0
	Niergoonda		do.	4	52	9	4	4
	Conaginhully		do.	11	37	8	6	6
	Buswanhully		do.	9	30	8	7	7
	Honaycoday		do.	8	37	9	12	12
	Ippugullullay		do.	12	0	9	6	6
	Cuttaypoora		do.	17	37	9	7	7
	Augullay		do.	27	0	9	7	7
	Nellawaugulloo		do.	18	52	8	2	2
	Chick Bundara		do.	18	7	7	6	6
	Dooda Bundara		do.	13	52	7	3	3
	Hemmapney		do.	9	22	7	2	2
	Coragal		do.	7	0	7	2	2
	Bairagoda		do.	2	0	8	0	0
	Dood Coonda		N. E.	3	7	8	2	10
	Chick Coonda		do.	4	30	8	5	1
	Bittugunhully		do.	12	22	7	6	6
	Lukkunnil		do.	6	30	7	5	5
	Baisoor		do.	15	22	8	0	0
	Horahully		do.	7	15	8	0	0
	Tauloor		do.	12	0	6	3	12
	Maugudahully		do.	2	45	9	7	19
	Mullugunhully		do.	4	30	10	1	18
	Junnairdanhully		do.	8	22	10	2	17
	Mawinhully		do.	6	15	9	0	0
	Kayraykayray		do.	7	15	8	0	8
	Hoolacode		do.	3	30	6	6	1
	Cunnugulloo		do.	3	0	5	6	6
	Munniegillay		do.	13	52	5	6	17
	Hullybyloo		do.	17	37	5	7	11
	Beechunhully		do.	5	37	5	3	4
	Bettadhully		do.	8	45	5	3	20
	Hossapooraa		do.	21	45	5	4	11
	Hebbulshay		do.	17	52	4	7	7
	Sumpaguddhaloo		do.	23	52	4	6	6
	Nakullagoodoo	N. W.	do.	1	52	5	4	11
	Ourydhaloo		do.	3	0	6	1	7
	Kittoor	do.	19	30	6	5	16	

Hobely of Nada.	VILLAGE NAMES.	Trigonometri- cal point from which ob- serv'd.	Bearings.	M.les.	Furlongs.	Yards.
Bembulloor	Bembulloor	Maullinby.	N. W.	11	37	2
	Shiwrhully	do.	"	3	5	142
	Kirrukunhully	do.	"	10	15	55
	Toallageor	do.	"	11	37	110
	Harahully	do.	"	10	7	55
	Baugayray	do.	"	8	45	192
	Cunnarhully	do.	"	3	7	142
	Moodrawully	do.	"	5	7	110
	Bulla	do.	"	22	37	162
	Chennapoora	do.	"	20	37	0
	Keeraybulla	do.	"	18	0	0
	Madray	do.	"	23	30	142
	Dundhully	do.	"	29	22	37
	Hosohully	do.	"	28	15	105
	Seera	do.	"	14	45	162
	Caudjoor	do.	"	20	37	215
	Chicka Kelatoor	do.	"	25	37	297
	Appusuthully	do.	"	28	0	55
	Jobacoday	do.	"	23	45	162
	Yedhully	do.	"	34	45	192
	Dood Kolatoor	do.	"	31	15	0
	Chukuhully	do.	"	35	30	0
	Koojugayray	do.	"	23	37	0
	Gowndhully	do.	"	20	0	160
	Sooligullulay	do.	"	8	45	0
	Halcunnay	do.	"	14	22	10
	Biddiroor	do.	"	8	45	192
	Wodarapoora	do.	"	5	0	110
	Kenkayray	do.	"	20	22	192
	Madaygoodoo	do.	"	19	15	192
	Chittugunhully	do.	"	22	30	92
	Heminaney	do.	"	12	30	0
	Serengaula	do.	N. E.	6	45	143
	Hundlay	do.	"	15	22	162
	Hoolshay	do.	N. W.	2	0	27
	Bellarhully	do.	N. E.	4	30	55
	Kayrayhully	do.	N. W.	6	7	152
	Goodoguhulay	do.	"	2	0	142
	Gopullapoora	do.	"	15	52	37
	Soguhully	do.	"	14	30	0

VILLAGE NAMES.	Hobely or N. and	Trigonometri- cal point from whence ob- served.	Bearings.		Miles.	Furlongs.	Yards.
			S.	E.			
Connagaul	...	Maullimby	18	27	2	1	82
Chicka Connagaul	...	do.	18	27	2	4	17
Auloor	...	do.	49	52	2	7	110
Kuntabuswanhully	...	do.	19	30	1	5	137
Kittulagudday	...	do.	6	0	1	7	17
Bunnawarra	...	do.	24	30	4	2	9
Sedapoora	...	do.	41	45	2	4	27
Doadhully	...	do.	N. E.	15	30	3	0
Hanugond	...	do.	S. W.	44	30	4	82
Doda Maloota	...	do.	34	52	3	4	132
Gudjay Hanugoad	...	do.	59	15	3	4	110
Addagulhully	...	do.	52	30	4	4	205
Heereekora	...	do.	30	52	1	7	110
Koogeeccoadu	...	do.	39	45	2	6	182
Hoennawully	...	do.	45	15	3	5	62
Sooly Mullattee	...	do.	22	22	3	0	0
Doadhully Gowdhully	...	do.	S. W.	88	0	1	3
Buswanacopooloo	...	do.	N. W.	75	30	1	3
Heggoola	...	do.	S. W.	88	0	1	162
Hallysuntabaray	...	do.	N. W.	69	15	1	0
Chinnapoora	...	do.	S. W.	44	37	2	55
Coogoor	...	do.	25	0	1	1	192
Shevapoora	...	do.	61	52	2	4	192
Harohully	...	do.	62	0	2	1	62
Adijyhully	...	do.	70	15	1	3	165
Goandhully	...	do.	N. W.	19	52	5	4
Mungaloor	...	do.	S. W.	85	15	2	4
Chickarra	...	do.	24	22	1	5	110
Soonty	...	do.	71	7	2	6	37
Karlehully	...	do.	N. W.	86	52	2	5
Nirrootoda	...	do.	N. E.	21	30	2	5
Hittulakayray	...	do.	2	7	2	6	165
Hoonshaykye	...	do.	10	45	2	4	192
Doodhully	...	do.	15	52	3	0	55
Siddagullulay	...	do.	20	45	3	5	147
Harroor Hossoor	...	do.	6	45	4	0	48
Showdinhully	...	do.	6	43	3	2	87
Cooroedadawully	...	do.	N. W.	14	37	1	3

Gunnagoor Hobely.	Mooloor Hobely.	Menesedula Hobely.	Nirrootola (contd.)	Nirrootola Hobely or Naad.	VILLAGE NAMES.		Trigonometri- cal point from which it is ob- served.	Bearings.	Miles.	Furlongs.	Yards.
					Maullimby.						
			Nundygoondy	...	N. W.	38	0	1	1	135	
			Naguwulla	do.	N. E.	62	0	2	5	110	
			Raminhully	do.	N. W.	25	45	1	4	165	
			Joginahully	do.	N. E.	15	30	2	3	105	
			Menesedda	do.	N. E.	46	37	3	7	27	
			Gunguwär	do.	"	43	0	4	3	195	
			Unkunhully	do.	"	49	15	4	1	115	
			Katinhully	do.	"	25	7	3	6	110	
			Shigamurroor	do.	"	57	30	4	1	38	
			Boodabumhully	...	"	62	0	3	2	95	
			Kysurawully	do.	"	49	30	4	4	197	
			Bettadhully	do.	"	40	0	3	7	27	
			Mibatapoora	do.	"	52	22	3	3	60	
			Ummully	do.	"	62	0	3	3	165	
			Moolor	do.	"	31	45	2	0	192	
			Maullimby	do.	S. E.	56	30	1	0	110	
			Adapunahosohully	do.	"	87	52	2	2	165	
			Bouwanhully	do.	"	75	30	1	4	0	
			Karagode	do.	N. E.	23	30	1	5	0	
			Haurohully	do.	"	51	15	2	0	165	
			Hosagooty	do.	"	78	30	2	2	62	
			Gunnagoor	do.	S. W.	2	0	4	0	165	
			Ounjigenhully	do.	S. E.	14	45	3	3	55	
			Yeddawoondy	do.	"	10	0	4	0	165	
			Gooninurroor	do.	"	10	0	4	4	110	
			Naguwully	do.	"	3	22	3	5	110	
			Sungainpoora	do.	"	24	30	3	6	27	
			Audy Naudoor	do.	"	5	45	6	4	165	
			Baugayray	do.	"	13	15	5	7	110	

CUDUGU PROPER, CONTAINS 20 NAADS.

Nunjarajputta	Naad.
Yeddoa	do.
Thawa	do.
Gudday	do.
Oolagoolee Moongayree	do.
Heoroor Noortekkal	do.
Soorlaby Mooshoo	do.
Hahlayray Baedugayray	do.
Muddukayray Horomullay	do.
Paudy Nakü	do.
Kudduthis	do.
Hoodoogayray Moondapum	do.
Bayngu	do.
Byru	do.
Yedday	do.
Hirrooa	do.
Baithoally	do.
Ammuthur	do.
Baypu	do.
Kooyeangayray	do.
Kuggoadloo	do.
Bettieth	do.
Kauvithmoos	do.

Yedday
Naku Naad.

Hobley or Ned.	VILLAGE NAMES.	Trigonometri- cal point from whence ob- served.	Bearings.			Miles.	Furlongs.	Yards.
				.	.			
Nunjarajputtan Nad.	Sidilingipoora	Maullimby.	S. E.	27	37	5	2	110
	Chick Aulwar	do.	"	24	37	7	2	82
	Dodda Aulwar	do.	"	21	45	7	7	20
	Andanypooro	do.	"	24	7	7	6	115
	Hossocotta	do.	"	23	0	8	3	110
	Haulaygootay	Codergurra- hully.	N. E.	37	0	7	4	27
	Causulgodi	do.	"	43	0	8	1	55
	Murroor	do.	"	43	0	7	3	55
	Hebbaully	do.	"	51	7	8	1	197
	Torianoor	Maullimby.	S. E.	36	27	9	6	55
	Guddayhosohully	do.	"	37	27	9	1	137
	Munjoor	do.	"	41	0	8	0	165
	Seringala	do.	"	46	30	9	3	192
	Chicka Naikana Hosohully	do.	"	38	37	7	7	165
	Nelloor	do.	"	46	37	8	0	115
	Hoolsha	Codergurra- hully.	N. E.	51	7	7	1	82
	Ramapoore or Ramasamy Cunnawye	do.	"	51	7	6	3	165
	Bawanugorri	do.	"	51	7	6	0	165
	Heggarhully	do.	"	53	7	5	6	137
	Bayraycotay	do.	"	40	0	5	0	55
	Siraholaloo	do.	"	41	0	4	4	865
	Coodigay	do.	"	57	27	5	4	77
	Hoologoonda	do.	"	32	30	3	2	0
	Chick Attoor	do.	"	43	15	3	5	77
	Dooda Attoor	do.	"	49	45	4	3	0
	Mungaloor	do.	"	63	15	5	2	87
	Coodooloor	do.	"	72	15	5	2	27
	Goomunakooli	do.	"	81	45	5	1	27
	Moolaysogay	do.	"	86	27	5	0	197
	Byckanhully	do.	S. E.	89	45	4	4	87
	Madaputna	do.	"	88	15	3	3	110
	Bulloor	do.	"	79	30	2	6	0
	Buswanhully	do.	"	66	15	2	2	55
	Bettagerri	do.	"	46	52	2	5	192
	Balagode	Seedasweer	N. W.	40	30	6	6	110

Hobely or Naad.	VILLAGE NAMES.	Trigonometri- cal point from which ob- served.	Bearings.	Miles.			Furlongs.	Yards.
				o	'	"		
Nunjaral puttan Naad Cont.	Rungasamoodra ...	Seedasweer.	N. W.	52	7	6	0	0
	Veerapaugshapoora ...	do.	"	53	27	5	4	125
	Hosoputna ...	do.	"	58	0	5	3	110
	Nunjarajputtun ...	Nooruckkul	S. E.	86	15	5	4	205
	Koombarhully ...	Soobra- muhn	N. E.	76	45	3	6	197
	Kothanhully ...	do.	S. E.	67	7	3	4	22
	Bettaduhully ...	Hurrugul	N. W.	21	7	2	5	127
	Koondhully ...	do.	"	2	15	2	5	142
	Santhully ...	do.	N. E.	34	0	1	3	110
	Hosohully ...	Maullimby	S. E.	2	30	7	0	93
	Hurruggammungala or Hurrugul ...	Hurrugul	S. W.	48	45	0	5	163
	Thulluturra Chuthully ...	do.	S. E.	57	15	2	5	27
	Butchully Hosohully Chuthully ...	do.	N. E.	86	15	2	5	60
	Hanagul Chuthully ...	do.	S. E.	74	45	3	1	15
	Yeddoor ...	do.	"	88	45	3	2	1
	Hanagul ...	do.	"	74	45	3	5	1
	Kaulkundoor ...	do.	"	83	0	3	6	21
	Hossobeudoo ...	do.	N. E.	72	22	2	6	19
	Doodoo Tholoor ...	do.	"	50	45	3	4	5
	Chuthully ...	do.	"	34	30	3	4	16
	Kooteyerradhunta ...	do.	"	10	7	3	7	11
	Chicku Tholoor ...	Maullimby	S. W.	83	27	3	5	11
	Chowduloor ...	Hurrugul.	S. E.	75	30	4	2	16
	Nagurroor ...	do.	"	70	15	4	2	5
	Bullagoonda ...	do.	"	62	30	5	2	2
	Kusboor.	do.	"	59	30	6	1	3
	Mussagoad ...	Maullimby	S. W.	24	45	5	4	10
	Kibbutta ...	do.	"	37	45	4	5	4
	Harohully ...	do.	"	27	30	4	2	11
	Woalligoonda ...	do.	"	14	37	4	3	3
	Bucturhully ...	do.	"	7	7	5	0	8
	Dood Ubboor ...	do.	"	11	22	5	3	13
	Chick Ubboor ...	do.	"	7	7	5	4	13
	Nairgullulay ...	do.	"	1	2	5	7	1
	Ittulumukki ...	do.	S. E.	0	45	6	2	16
	Nagullalu Kurkhully ...	do.	S. W.	20	45	6	2	8

Hobday or Naad.	VILLAGE NAMES.	Trigonometri- cal point from which ob- served	Bearings.	C		Miles.	Furlongs.	Yards.
				°	'			
	Hurroor	Maullimby.	S. W.	5	7	6	6	110
	Nairlay	do.	"	3	52	7	3	0
		Codergurra- hully.	N. E.	13	52	6	2	177
	Yellakanoor	Hurrugul.	S. E.	49	0	7	2	175
	Bayloor Buswanhully.	Codergurra- hully.	N. E.	24	15	3	6	165
	Hoodoogooroo	Payrahjee.	S. W.	72	15	2	2	110
	Currikay	do.	N. W.	12	45	2	7	0
	Payrahjee	Tháoor.	"	7	15	4	0	55
	Chembinney	Mooda- paudu.	S. W.	12	37	3	6	197
	Sumpajee	Tháoor.	"	66	30	1	4	165
	Thunnamuhni	do.	"	39	27	0	7	55
	Thaoor	do.	N. W.	30	37	1	6	27
	Baughamundla	do.	"	32	30	3	0	110
	Sayrungaul	do.	S. E.	2	27	2	3	95
	Korungaul	Hurrugul.	"	1	37	4	2	0
	Suringullay	do.	"	4	"	5	5	102
	Mouttakkooloo	do.	"	18	7	4	2	0
	Belligayray	do.	"	28	22	2	2	182
	Thaukayray	do.	"	36	15	6	1	182
	Chickkuhriday	Codergurra- hully.	N. W.	53	30	6	4	97
	Jumboor	do.	"	46	20	5	0	0
	Gurrungundoor	do.	"	44	15	6	4	55
	Koomboor	do.	"	61	45	7	0	192
	Hahdaygayray	do.	"	31	32	4	4	165
	Yerrakoula	Hurrugul.	S. W.	3	"	3	5	0
	Gurruwully	do.	S. E.	37	45	5	0	27
	Kirrigundoor	do.	"	26	54	5	0	100
	Hahringly	Codergurra- hully.	S. E.	12	30	5	2	110
	Kirrudurray	Hurrugul.	S. W.	89	52	1	5	110
	Andagoowye	Codergurra- hully.	N. E.	22	37	0	5	0
	Kulloor	do.	S. W.	56	52	3	6	110
	Uttoor	do.	N. W.	41	27	3	4	27
	Nakoor	do.	S. W.	63	"	2	0	55
	Codergurrahully	do.	N. E.	59	15	4	2	200
	Maugadoor	Noorkul.						

Hobaly or Naad.	VILLAGE NAMES.	Trigonometri- cal point from which ob- served.	Bearings.	Miles.	Furlongs.	Yards.
Colagoolin Moo- dagayree Naad.	Oolagoollee ...	Codergurra- hully.	N. W.	78	7	2
Colagoolin Moo- dagayree Naad.	Bulloor ...	do.	"	87	30	4 19'
Colagoolin Moo- dagayree Naad.	Shanabogunhully ...	do.	"	56	45	4
Colagoolin Moo- dagayree Naad.	Baychunhully ...	do.	"	83	7	2 11'
Colagoolin Moo- dagayree Naad.	Hurroodoor ...	do.	"	56	52	4 5
Colagoolin Moo- dagayree Naad.	Bettagayray ...	do.	"	65	52	0 29
Colagoolin Moo- dagayree Naad.	Mukkundoor ...	Noorkul.	N. W.	29	30	6 2
Colagoolin Moo- dagayree Naad.	Nurrugunni Oomait ...	do.	"	33	30	7 3
Colagoolin Moo- dagayree Naad.	Hadukulloonaihud- hallu ...	Codergurra- hully.	"	89	52	1 13
Colagoolin Moo- dagayree Naad.	Ibburnywullawaddy ...	Muddukayray.	S. E.	83	0	2 0
Colagoolin Moo- dagayree Naad.	Kayddackadhala ...	Noorkul.	N. W.	65	15	4 17
Colagoolin Moo- dagayree Naad.	Moadoor ...	do.	"	7	45	2 0 11
Colagoolin Moo- dagayree Naad.	Hoaroor ...	do.	"	4	7	2 6 14
Colagoolin Moo- dagayree Naad.	Wallamoady ...	do.	N. E.	39	30	1 2 1
Colagoolin Moo- dagayree Naad.	Irrullay ...	do.	"	7	45	1 3 1
Colagoolin Moo- dagayree Naad.	Chayrullay ...	do.	"	76	0	1 4 20
Colagoolin Moo- dagayree Naad.	Sirimungauilla ...	do.	S. E.	40	7	1 5
Colagoolin Moo- dagayree Naad.	Niddooowuttoo ...	Muddukay- ray.	N. W.	9	15	0 5
Colagoolin Moo- dagayree Naad.	Kaulloor ...	do.	"	18	0	1 5
Colagoolin Moo- dagayree Naad.	Hummeela ...	Soobramuhni.	S. E.	10	45	6 4 13
Colagoolin Moo- dagayree Naad.	Moatloo ...	do.	"	30	0	6 6 5
Colagoolin Moo- dagayree Naad.	Koombaraguddigay ...	do.	"	42	45	5 2 4
Colagoolin Moo- dagayree Naad.	Munkeea ...	do.	"	48	52	6 0 7
Colagoolin Moo- dagayree Naad.	Kikkurhully ...	do.	"	55	7	4 6 1
Colagoolin Moo- dagayree Naad.	Soorlaby ...	do.	"	37	44	6 3 19
Colagoolin Moo- dagayree Naad.	Hahlayray Thayrum- bulley ...	Codergurra- hully.	N. W.	88	30	6 0 16
Colagoolin Moo- dagayree Naad.	Kuddhundaula ...	Cotay Betta.	S. E.	28	7	4 6 9
Colagoolin Moo- dagayree Naad.	Aarcopa ...	do.	"	21	7	5 5 2
Colagoolin Moo- dagayree Naad.	Kaundanuquilly ...	do.	"	31	15	5 3 5
Colagoolin Moo- dagayree Naad.	Bettikayraymayluth- auloo ...	do.	"	15	37	3 0 7
Colagoolin Moo- dagayree Naad.	Hemmuthauloo ...	do.	"	15	52	4 0 19
Colagoolin Moo- dagayree Naad.	Mookodulloo ...	do.	S. W.	9	52	2 4 6
Colagoolin Moo- dagayree Naad.	Hodhokaunah ...	do.	S. E.	25	80	3 3 19
Colagoolin Moo- dagayree Naad.	Auwundee ...	do.	S. W.	31	37	1 5 11

		VILLAGE NAMES.		Trigonometri- cal point re- served. when ob- served.	Bearings.	°	'	Miles.	Furlongs.	Yards.
Hobely or Naad.	Muddukayray Horomullay Naad.									
	Kurrunangayray ...	Muddukayray	N. W.	8	15	9		4	110	
	Kurruwullay ...	do.	”	39	30	1		5	110	
	Hebbuthegayray ...	do.	”	16	30	2		0	30	
	Naidulluwunnuchullu	do.	”	39	30	6		4	110	
	Kullukayray Niddug- unnie	do.	”	32	”	2		4	165	
	Horomullay ...	do.	”	43	30	3		6	55	
	Gauleebeedoo ...	do.	”	45	”	4		3	0	
	Muddumbeela ...	do.	N. E.	18	45	2		1	190	
	Napoakle ...	Todianda- male.	N. E.	34	15	7		5	35	
	Poolicotayeerawoco- day ...	Thaoor.	S. E.	24	”	3		4	0	
	Eyeangayraygothan- gayray ...	Todianda- male.	N. W.	19	30	8		6	90	
	Ballamowutty ..	do.	N. E.	5	15	7		0	137	
	Payroor ...	do.	N. W.	7	15	6		6	90	
	Yemmaymaud ...	do.	N. E.	18	45	7		4	110	
	Nellijy ...	do.	”	17	15	5		4	192	
	Kolaykayraybaymoon- jee	do.	”	40	30	6		2	110	
	Baidithu ...	do.	”	46	0	7		5	182	
	Koonjullu ...	do.	”	31	0	3		7	182	
	Nellaudu ...	do.	”	11	37	2		5	10	
	Yewakkupaudu ...	do.	”	37	30	3		3	110	
	Chaylaywara ...	do.	S. E.	84	7	4		4	130	
	Paulingaulie ...	Veerajen- derpett tree	N. W.	86	52	5		6	145	
	Kurrada ...	do.	”	85	52	6		6	110	
	Poothoowaddu ...	do.	”	77	15	5		5	22	
	Bawaulley ...	Todianda- male.	”	66	30	7		2	5	
	Kokayray ...	do.	N. E.	71	7	5		5	165	
	Kirrundhaud ...	do.	N. E.	61	45	6		7	165	
	Kycaud ...	do.	”	56	0	7		3	0	
	Balamoory ...	Veerajen- derpett	N. W.	46	30	1		1	0	

Yedday Naku Naad.		Baingu Naad.	Baingu Naad.	Kudururthi Hoodoogayray Moondapuun Naad. Naad contd.	Hobely or Naad.	VILLAGE NAMES.	Trigonometri- cal point from which ob- served.	Bearings.	Miles.	Furlongs.	Yards.	
						Koninjugayray	Veerajen- derpett.	N. W.	52	15	7	4 165
				Nerriri idhuddu		Todianda- male.	N. E.	83	15	6	2 165	
				Murragoad		Noorkul.	S. W.	54	7	2	2 55	
				Hossokuray		do.	"	10	45	2	3 55	
				Kuttymaud		Veerajen- derpett.	N. W.	5	52	7	5 0	
				Arrucandu		Noorkul.	S. E.	6	30	3	2 27	
				Nelly Hoodoogayray		do.	"	47	45	6	3 110	
				Shoodooloor		do.	"	0	30	4	1 0	
				Waulmore		do.	"	65	30	4	5 165	
				Koondacherry		Thaoor.	S. E.	61	30	1	5 45	
				Poodhakulloo		Baingoor.	S. W.	42	22	2	2 105	
				Singatoor		do.	"	26	45	2	3 100	
				Koputty		do.	S. E.	15	30	1	6 105	
				Kolugadhaul		do.	"	46	52	3	3 165	
				Koottoorpoonagoad		do.	"	46	22	4	5 165	
				Eywettukkooloo		Todianda- male.	N. E.	18	0	8	6 92	
				Churrindittoo		Baingoor.	S. E.	5	30	3	2 165	
				Bodagha		do.	"	23	15	3	2 27	
				Baingoor		do.	"	40	30	5	1 0	
				Gooyan Seedapoort		Veerajen- derpett.	N. E.	37	15	6	7 0	
				Aariacommangau- la		do.	"	22	45	4	1 165	
				Daywunagayray.		do.	"	0	45	3	4 110	
				Blyrumbaada		do.	"	3	37	4	1 0	
				Yeddoor		do.	"	10	15	5	2 147	
				Halugoonda Can- dangayray		do.	N. W.	4	0	5	1 110	
				Umbatty		do.	S. E.	29	52	1	7 165	
				Chumbaybailloor		do.	N. E.	28	37	2	1 0	
				Imungulla		do.	S. E.	68	52	1	1 110	
				Poodthakatay		do.	N. W.	21	30	1	5 110	
				Kookooloor		do.	"	6	0	1	0 110	
				Muggulla		do.	S. E.	80	30	1	2 0	

Village Names.	Hobdy or Naad.	Trigonometrical point from whence observed.	Bearings.	Miles.			Furlongs.		Yards.	
				o	15	2	7	5	0	
Village Names.	Hobdy or Naad.	Balaugode	Veerajenderpett.	S. E.	22	15	2	7	55	
		Naingulla	do.	"	21	15	3	5	0	
		Eittengaula	do.	"	31	15	4	0	110	
		Heggullu	S. W.	36	0	5	1	120		
		Baithooley	do.	"	39	0	2	0	110	
		Arrujee	do.	"	15	15	2	0	190	
		Billagoonda	do.	N. E.	74	15	2	1	100	
		Ammuthu	Moogataaygayray.	N. "W.	52	30	4	1	100	
		Poolayray	do.	"	18	45	5	4	55	
		Kaumbaudy	Veerajenderpett.	N. "E.	49	45	2	5	110	
Village Names.	Ammuthu Naad.	Karumaudu	do.	N. "E.	7	0	4	0	30	
		Kullathaimaud	Moogootaygayray.	N. W.	41	30	3	3	110	
		Goatuwara	do.	"	38	0	2	0	95	
		Byegoad	do.	"	54	30	2	6	5	
		Kukkayray	do.	N. E.	29	15	1	1	105	
		Hossoor	do.	N. W.	15	0	3	2	50	
		Bettigayray	do.	"	22	30	4	7	5	
		Hauthoor	do.	"	78	15	2	3	40	
		Uttoor	do.	N. E.	31	52	3	0	192	
		Hossokayray	do.	S. W.	8	52	5	4	205	
Village Names.	Bypu Naad.	Maykoor	do.	S. W.	37	15	6	5	52	
		Korungaula	do.	"	44	0	6	1	110	
		Wuddurhully	do.	"	47	45	5	0	110	
		Chennienkotay	do.	"	26	52	5	3	10	
		Koolungode	do.	"	37	30	4	1	165	
		Naluwuttukulloo	Veerajenderpett.	S. E.	84	0	3	2	120	
		Thomurra	do.	S. W.	66	45	6	2	110	
		Mooroor	do.	N. W.	72	37	3	6	90	
		Nalukayray	do.	"	46	37	5	7	192	
		Mythaudy	do.	"	31	7	3	3	0	
Village Names.	Ammuthu Naad.	Kuddhunoor	do.	S. W.	86	15	2	3	0	
		Kadhaymooley	do.	N. W.	77	45	3	1	205	
		Arromulliay	do.	N. W.	58	37	3	2	10	
		Koonjilugayray	do.	"	57	52	6	2	135	
Village Names.	Ammuthu Naad.	Beulloomaud	do.	"	65	52	5	0	25	

Hubely or Naad.	VILLAGE NAMES.	Trigonometri- cal point from which ob- served.	Bearings.			Miles.	Furlongs.	Yards.
				o	.			
Kuggootoo Naad.	Auwundoor	Baingoor.	S. E.	79	37	4	7	15
Bettithoor	do.	"	77	22		3	6	200
Kauroogoonda	Muddukay- ray.	S. W.	50	30	5	0	110	
Arruwuttuckkooloo	do.	"	18	45	3	5	150	
Hayrow	do.	"	54	0	3	2	110	
Hooddoor	Veerajen- derpett.	N. W.	38	15	9	3	0	
Hoadthawaddoo	do.	"	43	7	10	0	0	
Koombulludhauu	do.	"	36	22	10	6	110	
Pauloor	Todian- damale.	N. E.	36	0	10	2	110	
Kurrietthoor	do.	"	27	0	9	3	55	
Bettikayray	do.	S. W.	37	30	4	5	165	
Madhlhay	Muddukay- ray.	S. W.	73	37	3	1	58	
Billigayray	do.	S. E.	19	30	3	5	110	
Kuggoadloo	Noorkul.	N. W.	81	15	2	7	70	
Haukudhu	do.	"	67	30	3	1	120	
Maykayray	Muddukayray.	S. E.	12	0	1	5	110	
Kautakayray	do.	S. W.	43	15	1	0	55	
Moogootagayray	Moogonta- gayray.	S. E.	64	30	1	4	112	
Koondhudda	do.	N. W.	85	0	0	6	110	
Arruwuttuckkooloo	do.	N. E.	70	0	1	1	200	
Eechoor	do.	S. E.	27	0	2	1	0	
Shettyayray	do.	S. W.	19	15	2	7	165	
Kohgunna	do.	"	9	37	3	6	0	
Kothundee.	do.	"	35	52	4	0	55	
Baudhagha Hosokayray	do.	"	55	37	4	4	110	
Roodroogoopay	do.	"	77	52	4	1	110	
Kundungaula	do.	"	64	45	3	3	0	
Hoodhhoor	do.	S. E.	46	0	2	7	55	
Hulleyguttoo	do.	"	59	22	2	2	165	
Baulajie	do.	N. E.	88	15	4	0	55	
Roodroobeudoo	do.	"	89	22	5	8	165	
Moyamoody	do.	"	72	30	3	0	95	
Hebbauly	do.	"	61	37	4	5	120	
Dhunnoogauloo	do.	"	85	0	6	0	110	

Hobely or Naad.	VILLAGE NAMES.	Trigonometri- cal point from whence ob- served.	Bearings.				Miles.	Furlongs.	Yards.
				°	'	"			
Kaunthamoor Naad.	Kodamboor	Verajender- pett.	N. W.	36	15	8	2	187	
	Baudagha	do.	"	36	30	6	7	110	
	Kiggauloo	do.	"	22	15	6	3	0	
	Ikola	do.	"	14	15	7	5	27	
	Moothooamoody	do.	"	23	22	9	4	0	
	Kaunthoor	do.	"	22	15	8	4	0	

KIGGUTT NAAD TALOOK.

Contains 7 Naads:—

Unjigayray Naad.

Aurykayray do.

Tawullugayray do.

Koorchy Toru do.

Kirrigoor do.

Hutthacuttu do.

Murray do.

Hentiacutts Naad.	Kirrigoor Naad.	Koordhy'lo- ru Naad.	Tawullugayray Naad.	Aurikay- ray Naad.	Unjigayray Naad.	Hobely or Naad.	VILLAGE NAMES.	Trigonometri- cal point from which ob- served.	Bearings.	°	'	Miles.	Furlongs.	Yards.	
			Baingoor	...	Moogaata- gayray	S. E.	20	30		4	0	110			
			Nurrookola	Chaynaw- ara	do.	"	28	15		3	5	82			
			Muggoatagayray	...	do.	"	49	15		4	1	55			
			Nuddukayray	...	do.	"	41	30		5	0	30			
			Hoodookayray	...	do.	"	25	0		5	4	165			
			Toowutchumukkuloo- kayray	...	do.	"	50	45		6	2	165			
			Atchinakanumoodoor	...	do.	"	44	7		5	7	55			
			Beully Moondoor	...	do.	"	56	52		8	4	0			
			Hyesoadooloo	...	Beerumanay.	N. E.	65	0		7	3	110			
			Konaygayray	...	do.	"	63	45		8	4	55			
			Beullyoot	...	Moogonta- gayray.	S. E.	79	45		8	1	207			
			Dawunnoor	...	do.	"	82	15		10	4	0			
			Baullullay	...	do.	"	79	7		9	1	110			
			Numinullay	...	Beerumanay.	S. E.	89	45		9	0	55			
			Shattygayray	...	do.	N. E.	81	15		8	4	0			
			Tawullugayray	...	do.	S. E.	75	0		8	5	0			
			Belloor	...	do.	N. E.	69	45		9	5	55			
			Harrihara	...	Brummagerry	"	1	15		9	7	55			
			Nallakayray	...	do.	"	10	0		8	6	55			
			Kothoor	...	Moogaata- gayray.	S. E.	59	15		9	1	110			
			Koorchy	...	Brummagerry.	N. W.	14	15		3	7	165			
			Sirimungullay	...	do.	N. E.	7	15		4	1	0			
			Tyladhu	...	do.	"	18	22		3	1	55			
			Kootthu	...	do.	"	44	22		3	3	55			
			Koomuttoor	...	do.	"	10	37		5	3	10			
			Mutthoor	...	Moogaata- gayray	S. E.	64	30		4	7	110			
			Kotoor	...	do.	"	59	30		6	6	110			
			Bissagoor	...	do.	"	70	15		7	6	55			
			Nulloor	...	do.	"	76	15		6	7	0			
			Kirrigoor	...	do.	S. E.	79	15		5	0	10			
			Bekkaysodoloor	...	do.	"	66	0		8	4	0			
			Niddugoomba	...	do.	"	70	15		10	0	0			
			Kaunoor	...	do.	"	61	45		9	3	0			
			Kotaygayray	...	do.	"	74	0		12	4	0			

Hobely or Nneed.	VILLAGE NAMES.	Trigonometri- cal point from when ob- served.	Bearings.				Miles.	Furlongs.	Yards.
Beerunnauny	Beerunnauny	S. E.	85	30	2	0	0	0	0
Porawaddu	do,	N. E.	80	30	3	3	0	0	0
Budughagerrikayray.	do,	"	75	30	5	2	0	0	0

SOOLEEAY TALOOK.

is divided into two large portions, Umr and Sooleay.

UMR TALOOK,

Contains 5 Magunnies:—

Kolumuggurra Magunnie.

Kunderpadee do.

Chokaudee do.

Moghurrudhu do.

Yainakul Dawarhully do.

VILLAGE NAMES.	Hobely or Naad.	Trigonometrical point from whence observed.	Bearings.			Miles.	Furlongs.	Yards.
				°	'			
Keiraybaugha	Soobramuhni.	S. W.	42	0		5	3	10
Hurriharu Pullathoadakukurjoday	do.	"	60	37		6	2	0
Kuttudu	do.	"	51	52		7	5	147
Kolumuggurra	Yedoonooroo	do.	39	30		7	5	27
Kullumukar or Kud-dumukull	do.	"	27	37		8	5	147
Dawachallu	Chokaudee.	S. E.	40	52		3	0	120
Moodapaudee	do.	"	51	45		6	0	17
Kunderpaudee	do.	"	70	0		6	1	180
Gotugar	do.	"	83	52		2	3	147
Nallukoor	do.	N. E.	88	30		4	7	0
Kullujee	Soobramee-hni.	S. W.	89	22		7	1	140
Moodoonoor	Chokaudee.	S. W.	72	30		1	7	65
Puduwanoor	do.	"	86	7		3	6	110
Moghurrudhee	do.	N. E.	68	30		3	5	0
Mullakajeebeulluku	do.	"	61	15		2	7	77
Poochupaudy	do.	"	66	0		4	6	110
Yainakul	do.	"	59	0		6	1	110
Dawarhully	do.	"	71	45		7	2	192
Buleela	Soobramuhni.	S. W.	82	55		6	5	165
Kainnay (this is situated in Punjee belongs to this)	Chokaudee.	N. E.	19	7		4	5	110

SOOLEEAY TALOOK.

Contains 6 Magunnies:—

Bulla Naad Magunnie.

Puduwanoor do.

Moodoonoor do.

Iddurrukah do.

Arranthode do.

Uddoor do.

		VILLAGE NAMES.		Trigonometrical point from which observed.	Bearings.	Miles.	Furlongs.	Yards.
Uddoor	Arranthode	Moodoonoor	Puduwanoor (Bille name Magunnie.)					
		Kaimbrayjee	Chokaudee.	S. E.	20	15	2	7 40
		Moodoonoor	do.	"	34	15	4	7 165
		Murrukoonjee	do.	"	16	45	4	6 110
		Mundacole	Uddoor.	N. E.	74	37	4	7 37
		Adjeewaramainala	do.	"	80	27	8	0 55
		Mooliah Kaunthmun-						
		gala	do.	"	75	30	9	6 0
		Jaulsoor Kautoor	do.	"	63	30	9	6 110
		Amburuttee Payrauloo	do.	"	69	27	7	4 82
		Kookoonoorsonangayray	do.	S. W.	59	0	5	0 0
		Koyekole Bittumpaudee	do.	"	39	0	4	7 120
		Ooburrurrukkumittoor	do.	"	10	0	4	2 55
		Ammaymuddiaroo	do.	"	21	0	5	5 55
		Kaunhittoolookairrat-						
		hoday.	do.	"	37	30	6	2 165
		Yannara	do.	S. E.	83	0	6	5 0
		Allaytee	do.	N. W.	50	30	4	7 110
		Arranthode Urroothul-						
		ly.	Payrahjee.	N. E.	24	0	5	0 110
		Bhylhully	Moodapauddee.	S. W.	42	27	3	7 37
		Thoorkauhna	Payrahjee.	N. E.	70	7	2	0 82
		Uddoor	Uddoor.	N. E.	39	22	1	4 192
		Dhaylumpaudee	do.	"	40	15	5	7 55
		Beullupauddee	do.	"	55	52	6	4 192
		Konnakumunjula	do.	"	51	0	7	5 55
		Myaula	do.	"	22	0	3	4 110

POOTTOOR TALOOK.

Contains 4 Magunnies:—

Punjee Magunnie.

Nettinukay do

Bullary do

Poottoor do

Bullary Magnumie.	Nettimukay Magnumie.	Punjee Magnumie.	VILLAGE NAMES.	Trigonometri- cal points from which were ob- served.	Bearings.			Miles.	Furlongs.	Yards.
Bullapu	...	Chokaudee.	N. W.	32	30	4	5	125		
Kayempaudee	...	do.	"	21	27	5	4	0		
Aduokaru	...	do.	"	41	52	4	4	137		
Bullpu Moodoonoor	...	do.	"	38	45	5	6	140		
Arrugoody	...	do.	"	31	27	5	7	165		
Poolkooku	...	do.	N. W.	7	0	5	7	0		
Punjee Moodoonoor	...	do.	N. E.	29	37	4	0	147		
Yennamoor	...	do.	N. W.	24	52	4	1	82		
Kaunchody	...	do.	"	56	30	3	4	147		
Kullumuduku	...	do.	"	61	30	2	3	85		
Eyewuttukkooloo	...	do.	"	1	7	3	4	0		
Punjee Devarhully	...	do.	N. E.	4	0	2	7	115		
Pudduwanoor	...	do.	N. W.	29	7	2	4	165		
Pumbaythaudee	...	do.	"	11	30	2	2	165		
Kukkunikchiddukulloo	...	do.	N. E.	25	7	2	4	10		
Koothookoonjay	...	do.	"	37	52	1	7	12		
Yeddamungulla	...	Kul Betta.	"	76	52	4	2	110		
Allayjee	...	do.	"	78	52	2	7	5		
Dholapaudee	...	do.	"	42	0	4	0	42		
Iddeerurukku (this be- longs to Bullaree.)	...	do.	"	28	27	2	3	10		
Amrakasupaudy	...	do.	"	9	37	2	7	137		
Bettumpaudee	...	Maddhow.	N. W.	81	15	6	6	135		
Niddoopolly	...	do.	S. W.	89	45	5	3	82		
Arrieddoakah	...	do.	N. W.	70	0	3	3	110		
Mahdeenoor	...	do.	"	73	15	1	3	110		
Nettinukay	...	do.	S. W.	73	30	7	5	55		
Koombrajee	...	Niddoopolly	"	54	30	6	0	55		
Ooperungaula	...	do.	"	58	30	7	7	117		
Pudduray	...	Maddhow.	"	80	0	10	1	67		
Payrudhauullo	...	Niddoopolly	"	78	52	10	1	192		
Baillu	...	do.	"	73	45	12	0	175		
Belloor	...	do.	"	42	13	3	3	192		
Moodoonoor	...	Bella Naad.	S. E.	86	0	6	3	55		
Ahdhoor	...	Uddoor.	N. W.	47	7	3	4	110		
Moghurra	...	Kul Betta.	N. W.	47	27	5	1	42		
Sumpaudee	...	do.	"	56	45	5	0	142		
Poonachupaudee	...	do.	"	65	0	4	4	87		
Koomaramungulla	...	Maddhow.	N. E.	15	0	4	2	0		

Hobely or Naad.	VILLAGE NAMES.	Trigonometri- cal point for when ob- served.	Bearings.	.	.	Miles.	Furlongs.		Yards.
	Bembeelah	Kul Betta.	N. E.	68	37	3	7	82	
	Paulathaudee	Maddhow.	"	52	30	2	4	137	
	Maddhow	do.	S. E.	43	30	1	2	0	
	Kollutugay	do.	"	89	7	2	3	110	
	Douen Kollutugay	do.	"	57	0	2	1	192	
	Moondoor	do.	S. W.	35	52	2	3	110	
	Surroay	do.	N. W.	2	37	3	7	127	
	Yellia	do.	"	6	45	4	4	137	
	Kaidumpaudee	do.	"	26	27	3	3	147	
	Kayoor	do.	"	1	27	3	4	137	
	Jary Naad	Kul Betta.	S. E.	7	15	4	4	147	
	Bullary	do.	"	7	15	2	0	137	
	Tuntapauddee	do.	S. W.	25	27	3	1	27	
	Peerayjee	do.	"	70	45	1	6	95	
	Chinnawarra	do.	"	72	15	2	2	0	
	Payrumoonda	do.	N. W.	73	0	2	1	22	
	Sowanoor	do.	"	37	15	3	4	65	
	Koodoomar	do.	"	45	0	3	5	67	
	Bellundoor	do.	"	39	0	2	6	120	
	Koonkia	do.	"	49	0	2	4	102	
	Nettar	do.	S. W.	19	45	2	5	165	
	Augullee	do.	N. W.	25	0	2	1	55	
	Kaiemunna	do.	"	25	15	2	7	72	
	Koomoothaudy	do.	"	22	45	3	4	7	
	Murukutta	do.	N. E.	8	27	2	4	192	
	Muggurunjee	do.	"	7	52	1	6	165	
	Nauleelah	do.	N. W.	5	0	3	4	82	
	Chirrooaka	do.	"	2	0	4	3	10	
	Kaunyoor	do.	N. E.	2	52	0	7	110	
	Kullupuddhuttu (this belongs to Punjee)	do.	"	81	52	0	6	0	
	Koondoolee	do.	"	76	52	1	7	82	
	Mooroolea	do.	S. E.	81	37	1	7	120	
	Pijivina	do.	"	75	7	2	7	110	
	Murruweenjee	do.	"	62	15	3	5	15	
	Moopayreea	do.	"	52	27	2	6	90	
	Budjinnie	do.	"	45	30	1	6	57	
	Kodeaulee	do.	S. W.	8	7	0	5	42	
	Turrukujee	do.	S. E.	7	15	1	3	197	
	Baulcela	do.	"	46	30	3	0	110	

Ludhian District & Union (C. O. M.)	Hotely or Naad.	VILLAGE NAMES.	Trigonometri- cal point from which ob- served.	Bearings.	Miles.	Furlongs.		Yards.
						°	'	
Kootee	...	Chokaudee.	N. W.	75	15	3	7	110
Moondoogaroo	...	Kul Betta.	S. E.	38	15	3	5	15
Nuddoobitto	...	do.	N. W.	35	0	1	1	110
Kullumbee (in Punjee)	...	do.	N. E.	68	30	3	7	110
Kullunjee	...	do.	S. E.	31	37	2	7	55
Baillaioor	...	Bella Naad.	"	14	30	3	5	32
Bellanaad	...	do.	"	25	37	1	1	0
Aariapoo	...	do.	"	58	30	3	5	197
Ooloomuggurra	...	Maddhow.	N. W.	57	0	4	5	147
Pullupinjee	...	do.	"	45	27	4	6	130
Kooreeah	...	Bella Naad.	S. E.	63	30	5	2	110
Paulinjee	...	do.	N. W.	74	30	4	7	110
Adjallaudee	...	Maddhow.	N. E.	25	22	5	6	5
Kuddiah	...	do.	"	12	15	6	1	110
Kayminjee	...	Bella Naad	S. E.	89	0	3	6	200
Neirymuggurra	...	Kul Betta.	N. W.	89	45	5	6	110
Veramungulla	...	Bella Naad.	N. E.	49	0	6	6	165
Alluddooka	...	do.	"	68	45	5	0	165
Santagode	...	do.	"	76	27	6	5	27
Poottoor	...	do.	"	76	37	2	1	215
Oormullay	...	do.	"	70	0	4	3	0
Chiku Moodoonoor	...	do.	"	59	0	4	1	110
Beullypaudee	...	do.	"	53	37	5	6	0
Bunnoor	...	do.	"	43	0	3	2	77
Kodimpaudee	...	do.	"	45	0	5	1	197
Nuckullaudee	...	do.	"	37	27	6	5	140
Bell'oor	...	do.	"	22	27	4	7	82
Pairnay	...	do.	"	16	7	4	7	55
Pudduwanoor	...	do.	"	20	7	2	7	55
Kubbukku	...	do.	N. W.	9	27	2	4	110
Kullookah	...	do.	N. E.	30	0	1	6	0
Koodypaudee	...	do.	N. W.	36	15	1	1	55

General View and Description of the Boundary

DESCRIPTION.	No.	Angles.		Distances.			Objects.
		°	'	Miles.	Furlongs.	Yds.	
* The Division between Mysore and Wynnaad takes place at the N. W. angle of the latter district and is therefore formed by the Kaydaygalholay. Quitting Moogooda ; the boundary passes over undulating slopes and through a thick Forest to 138. — It here crosses the Naugur holay which is tolerably large.	135	31	15	"	3	110	Division of Wynnaad and Mysore Moogooda.
	"	75	45	"	4	170	
	141	46	"	"	7	110	
	140	30	30	"	4	165	
	"	18	15	"	3	110	
	"	79	45	"	4	100	
	138	16	58	"	4	165	
	137	40	0	"	5	55	Division of Koorchy Toru
	136	51	15	"	4	40	Naad.
Quitting the Naugur holay the boundary passes over similar ground and an equally thick jungle to 131 when it passes the Saurtee holay an inconsiderable stream.	135	85	45	1	"	"	Division of
	134	33	"	"	4	"	Tawullugay ray
	133	5	"	"	6	55	Naad. Here passes
	13	5	"	"	3	5	Sauntee holay.
	13	338	45	"	1	90	Small.
Leaving this stream the line of Demarcation between the two Territories passes through a country differing in no particular from what has been described the slopes over which the line passes are low and covered with a thick Forest it crosses the large road to	130	338	45	"	3	55	
	"	350	30	"	4	110	
	"	332	"	"	4	165	
	129	332	"	"	3	165	
	"	347	15	"	1	120	
	128	347	15	"	3	"	
	"	7	15	"	3	40	
	127	334	45	"	5	"	
	126	334	45	"	2	120	
	"	352	30	"	2	55	
	125	352	30	"	3	165	
	124	6	45	"	2	10	
	"	339	15	"	1	55	
Heggadavencotta at 122, and quitting it continues exactly of the same character to	123	339	15	"	3	55	Division of
	122	341	15	"	5	110	Huttuccotta Naad
	"	318	45	"	3	110	and here crosses
	121	318	45	"	5	165	large road to
	120	355	45	"	2	110	Heggadavencotta.
Koomanoor Parra 114, on the bank of the Luchmun Tirut.	119	355	45	"	1	90	
	"	319	15	"	2	100	
	117	324	10	"	4	240	
	116	348	15	"	5	110	
	115	311	45	"	3	100	Koomanoor
	114						Parra on bank of the Luchmun Tirut.

DESCRIPTION.	No.	Angles.		Distance.			Objects.
		°	'	Miles.	Furlongs.	Yds.	
Crossing the above river from this point it proceeds 6½ Furlongs through a forest, whence descending into the River, its waters mark the Division till to 109. The river of this distance has high banks, a sandy bottom and is not easy to be crossed.	112	350	15	"	3	"	
	111	350	15	"	2	10	
	110	350	15	"	1	55	
	109	350	15	"	3	200	
		350	15	"	2	"	
	108	312	30	"	2	55	
		237	45	"	3	140	
	107	269	"	"	2	"	
	106	302	"	"	2	55	
		287	15	"	4	180	
	105	311	45	"	2	110	
		343	15	"	2	"	
		322	58	"	2	110	
		335	45	"	4	110	
		308	45	"	1	165	
Quitting the Luchmun Tirut the country becomes rather steeper, the Boundary slightly ascending, proceeds over a comparatively high ridge of slopes till reaching 100.	104	334	45	"	2	55	
		334	45	"	4	165	
	103	320	30	"	1	170	
		320	30	"	1	170	
	102	352	"	"	2	165	
		293	30	"	3	"	
		313	55	"	3	"	
	101	271	5	"	4	"	
	100	247	"	"	4	110	
From this point to Cud-deway holay a small stream forms the division till to 98.		308	45	"	7	60	
		289	15	"	2	200	
	99	219	30	"	1	55	
		272	15	"	4	100	
	98	229	45	"	2	165	
		300	45	"	2	165	
		340	40	"	2	55	
		220	30	"	4	"	
	97	350	15	"	1	170	
	96	49	"	"	3	50	
	95	346	30	1	2	"	
		310	"	"	2	55	
		294	45	"	3	110	
	94	315	30	"	5	55	
		315	30	"	1	20	
		355	30	"	4	165	
	93	316	45	"	2	55	
		"	"	"	0	200	
		29	15	"	1	"	
	92	"	"	"	3	"	
		340	30	"	1	165	
	91	344	15	"	3	55	

DESCRIPTION.	No.	Angles.		Distances.			Objects.
		°	'	Miles.	Furlongs	Yards.	
with a high impervious Forest forms an excellent boundary, Mawcull and Seedasweer are the most conspicuous tops of it.	90	272	45	0	1	0	
	89	272	45	0	3	10	
	88	340	15	0	3	55	
"	278	"	0	3	55		
"	326	30	0	3	165		
Quitting the Seedasweer range of hills the boundary gently descends and following the course of a small nullah for a considerable distance, meets the Bhyrun holay along whose Stream it passes till reaching the Cauvery river to 81 close to the village of Rungasamoodrum.	85	283	45	0	5	170	
	84	262	15	0	4	55	
"	262	15	0	0	110		
"	83	329	30	0	0	165	
"	329	30	0	6	0		
"	345	15	0	3	165		
"	324	15	0	5	165		
"	82	307	"	0	7	20	
"	345	10	0	2	90		
"	275	15	1	0	0		
	81	243	15	0	4	55	

REMARKS on the foregoing Borders of the Boundary.

From the point (Moogooda x.) marking the Division between Mysore and Wynnaid, till the line of separation falls into the Cauvery near Rungasamoodrum, the boundary passes through a thick forest nearly impervious in many parts, it proceeds partly over undulating slopes, and partly over the crest of the low range of the Seedasweer Hills:—this part of the Frontier is crossed but in few places, having but three large roads, and those indifferent throughout it, and the woods extending a considerable distance on each side of the line of demarcation render it naturally strong, difficult to be approached, and easily defended.

From Rungasamoodrum till Moogooda E. the Cauvery forms the boundary its breadth is during this distance about $\frac{1}{4}$ of a mile—the banks are always high, and steep, and the bed rocky, it may be considered as constituting a strong frontier from June to August inclusive, it can only be passed in a boat, the stream however for the remainder of the year admits of its being forded in some places, but the elevation of its banks, renders it readily defensible during the early part of the country in	0	0	"	5	0	
	41	5	"	4	110	
	3	15	"	2	0	
	29	45	"	7	0	
	10	45	"	6	55	
	85	15	"	4	55	
	47	0	1	0	55	
	77	15	1	3	55	
	90	30	"	3	55	
	342	30	"	7	110	
	45	30	"	4	110	
	317	0	1	1	110	
	351	15	"	3	110	
	16	0	1	3	0	
	72	0	"	4	165	
	17	0	"	5	110	

DESCRIPTION.	No.	Angles.		Distances.			Objects.
		°	'	Miles.	Furlongs.	Yards.	
its vicinity consists of steep slopes partially covered with jungle, advancing to the north however this gives way to open cultivated plains		99	10	0	7	165	
		22	5	0	4	165	
		312	"	1	"	55	
		"	"	0	3	70	
		96	15	0	6	55	
		18	48	0	3	55	
		323	30	0	6	160	
		63	30	0	4	110	
		109	45	0	7	110	
		49	45	0	5	165	
		7	30	0	2	55	
	83	334	"	0	2	0	Moogooda. E.
		220	35	0	2	110	
		311	15	0	3	0	
		280	45	0	7	55	
		322	45	0	4	55	
commencing from Moogooda E. where the boundary quits the Cauvery it passes over a small Nulla till to 79.	79	"	"	0	5	110	
		300	15	0	1	55	
		222	35	0	2	10	
		189	5	0	3	0	
		224	30	0	1	60	
Thence it runs between the village of Kautinfully and Villoor and proceeds over easy slopes to 75.	77	175	45	0	4	165	
From this point it passes for a very short way through the bed of a small tank and ascends a rather steep ridge to 74.	76	292	15	0	6	70	
	75	270	15	0	4	0	
Thence it continues to pass over a rather stony ridge of irregular height till Thence descending it passes two small tanks at 71 and meets another close to 70.	74	162	55	1	"	130	
		265	58	0	6	0	
		327	40	1	"	40	
		73	345	"	"	165	
		72	336	30	1	200	
Quitting it the boundary proceeds over a similar country to 69.	71	24	"	0	3	123	2 Small tanks.
		325	28	0	1	137	
	70	26	35	0	1	168	Small tank.
		271	58	0	2	0	Division of
		290	30	0	4	137	Counegaul
	69	305	13	0	1	200	Gunniagoor with
	68	62	35	0	4	0	Arculgoad.
		337	40	0	5	13	Cuddavay holay.
		2	35	0	7	110	Small division of
From which till to 68 it passes through the bed of the Cudvayholay here small. Quitting this nulla the boundary passes over easy slopes till to near 66 when it runs for a very short way over steeper ones but again proceeds over a low flattish country covered with a light jungle to 64.	65	14	30	0	5	0	Counagaul Modoor with Arculgoad.
	64	82	30	0	2	82	

DESCRIPTION.	Nos.	Angles.		Distances.			Objects.
		°	'	Miles.	Furlong.	Yards.	
Thence to 63 it passes along the Chenholay.	63	334	28	"	6	"	Moogood and Neiratada with Aroulgood and Chenholaysmali.
Quitting which it runs over a similar country to what has just been mentioned, passing along the banks of two small tanks at 62 and 61.	62	120	34	"	6	55	2 small tanks.
Quitting them it continues to proceed over a rather flat country, passes close to the village of Sheaghurra at 57 continues of the same character to 53, here it passes the slopes running from Men-goota which are comparatively steep, it crosses the great road to Mysore at 51 and runs over an open waving country to 49 passing for the greater part of this distance between cultivation, here it joins the Chenholay and continues passing through it to 48. - It proceeds over a close country to 46 where it crosses the great road to Mullyputna from this point it proceeds over rather steep slopes and through a jungly country to 42.	61	"	"	5	55		
From this it proceeds over cultivation mostly to 41 where quitting fields it passes through a rather jungly country to 40 - when it joins the Hemmawutty.	56	70	15	"	1	165	
	55	347	30	"	2	100	
	51	284	30	"	3	69	Cross great road to Mysore.
	50	294	55	1	"	55	
	49	343	10	"	7	68	Division of Men-goota and Hola-gode with Aroulgood. Here meet the Chenholay.
	48	11	45	1	1	55	
	47	328	10	"	5	165	
	46	347	15	"	2	10	
	45	9	"	"	2	123	Division of Hola-gode and Coodooloor with Aroulgood.
	44	80	30	"	5	27	Cross great road. Great road to Mullyputna.
	43	96	10	"	3	41	
	42	51	15	"	2	62	
	41	28	15	"	1	62	
	40	34	55	"	6	62	
	42	85	30	"	1	123	
		19	55	"	5	110	
		60	10	"	2	192	Division of Mahajadroog, Coodooloor and Aroulgood. Moogooda D.
		336	28	"	6	"	
		354	"	"	3	44	

Leaving the Cauvery at Moogooda E., it will be seen that the boundary passes over a country much more open than the previous part, the thick forest has given way to a jungle of light brushwood occasionally interspersed with trees of a larger growth, but the wood is in scarcely any place sufficiently thick to answer the purpose of defence. The declivities over which the line of division passes during this distance are few and inconsiderable.

DESCRIPTION.	Nos.	Angles.		Distances.			Objects.
		°	'	Miles.	Farlongs.	Yds.	
		271	58	"	4	55	
		258	15	"	6	110	
		294	15	"	4	165	
		270	"	"	4	"	
		285	58	"	1	165	
		313	15	"	2	165	
		346	15	"	4	110	
		287	15	"	2	165	
		314	58	"	2	165	
		271	30	"	1	165	
		215	10	"	1	110	
		190	"	"	4	165	
		238	35	"	2	"	
		275	40	"	3	"	
		313	30	"	2	"	
		337	35	"	6	"	
		259	28	"	4	110	
		333	28	"	6	110	
		236	"	"	2	"	
	37	196	"	"	2	"	
		235	15	"	"	55	Division of
		180	"	"	3	55	Coodooloor
		150	58	"	2	165	Condley and
		180	"	"	4	110	Mahrajee.
		219	30	"	2	"	
		180	"	"	2	55	
	38	138	"	"	5	165	Moogooda C
		161	32	"	3	110	Division of Mah-
		161	32	"	1	55	rajee
		35	104	10	2	110	Mungcerabad
		33	180	"	"	165	and Coadley.
		259	"	"	1	55	
		208	30	"	2	"	
		31	249	35	"	200	
		22	294	"	4	"	
		28	269	30	"	100	
		26	180	"	3	120	
		25	150	28	"	120	
			216	35	"	63	
			176	"	5	63	
			202	15	"	"	
			180	"	4	"	
		24	124	20	"	1	120
		23	158	10	"	1	55
					"	"	Yeggudhully
							close and here
							cross road to
							Bisaly.
							Cross a large
							branch of the
							Kauty holay.
	22	106	15	"	2	200	

DESCRIPTION.	Nos.	Angles.		Distances.			Objects.
		°	'	Miles.	Furlongs.	Yards.	
Quitting the nulla it experiences some slight acclivity, but passes over a generally open and rather waving country till to 20 it meets here close to the village of Chemmuhalli a large branch of the Kavuty hollow from this it passes along this nulla till to 19, this stream is small; its banks low, everywhere fordable, the country on each side is well cultivated. Quitting the nulla it passes over open and undulating ground crossing a little paddy cultivation at 17. Thence it proceeds over similar country to No 18, passing close by Codugu betta, it descends to a null nulla and ascends to 14 from this the boundary passes over a steep and bare ridge running by Narahalli Beedrahy betta till to Moorlukky betta 12. From this it descends to the nulla near Yoddachinta, thence passes along it to the junction of larger one No. 9 Dara. Quitting this it ascends with considerable steepness to Nitty betta No 8. From this point it continues to pass over an exceeding steep and precipitous ridge crossing a cudding or breast work at 5, the elevation of this ridge are of unequal elevations but all are high, its top is bare, but the country immediately at its foot is exceedingly jungly. From this point the boundary passes along one of the streams forming the head of the Coomarderry river, it runs till Moogooda A, through an exceeding steep and thick forest, this point forming the division between Canara, Codugu, and Mysore. Leaving Moogooda the boundary after some distance begins to ascend the sides of the steep and jungly hill of Soobramuhni and passing within	21	124	"	5	137		
		159	10	"	4	"	
		102	20	"	2	165	
		31	"	1	110		
	20	77	"	1	110		
		148	30	"	3	55	
		164	15	"	3	55	
		134	50	"	2	100	
		175	"	5	110		
		209	30	"	3	"	Division of
	19	180	"	2	120		Mooloor, Gowd-
		255	40	"	5	110	hully and Mun-
		288	10	"	3	"	geerabad.
	17	255	30	"	4	110	
	16	230	"	4	110		Cross culti-
	15	307	"	4	110		Division, Division of
		245	"	4	"		Gowdihully.
	14	278	"	4	"		Yeddooa Naad
		308	10	"	4	110	and Mungeera-
		336	40	"	7	120	bad.
	12	318	"	1	3	165	
		222	40	1	"	110	
	10	265	15	"	1	165	
	9	306	20	"	2	143	
		243	"	"	5	55	
	8	259	20	"	3	165	
		217	28	"	2	110	
	7	180	"	"	1	165	
	6	265	15	"	3	55	
	5	240	30	"	4	"	Cross Cud-
	4	290	30	1	1	"	dung.
		322	"	"	5	55	
	3	311	"	"	3	55	
		333	10	"	5	55	
	2	276	28	1	1	100	
		330	15	"	3	55	
		274	45	"	6	"	
		225	55	"	7	"	
		249	28	"	6	55	
		223	30	"	4	120	
		234	45	"	3	55	
		285	30	"	4	90	
	1	180	"	"	6	55	
	2	103	30	"	3	27	
	3	189	40	"	3	27	
	4	180	"	"	3	110	

DESCRIPTION.	Nos.	Angles.		Distances.			Objects.
		°	'	Miles.	Feet	Yards.	
	5	225	"	3	110		
	6	142	"	1	2		
	7	214	30'	"	7	55	
	8	189	30	"	3	166	
	9	153	10	"	4	"	
	10	268	40	"	2	55	
	11	224	"	"	1	110	
	12	247	"	"	2	166	
	13	214	30	"	6	55	
	14	308	45	"	3	55	
	15	271	40	"	3	120	
	16	240	15	"	2	110	
	17	293	30	"	2	110	
	18	261	"	"	3	"	
	19	213	20	"	7	166	
	20	269	30	"	4	166	
	21	347	56	"	3	120	
	22	306	15	"	2	200	
	23	337	40	"	3	190	
	24	301	15	"	3	166	
	25	242	30	"	3	100	Village of Agrarum close Division of Hoolum-
	26	330	30	"	6	55	uggurra and Kunderpandee
	27	58	"	"	1	"	
	28	99	15	"	4	137	
	29	44	50	"	3	27	
	30	334	15	1	0	55	
	31	352	40	"	7	"	
	32	90	40	"	2	110	Division of Kunderpandee and Yainkull
	33	36	15	"	2	55	Daverhully. Pass great road to Soobramuhi..

From the point where the boundary quits the Hemmawttil crossing the small nulla at Chicks Tholoor close to Codugu betta (No. 14) it proceeds through a comparatively champaign country passing over open slopes and cultivated fields, and in no place during this distance can it be considered as at all difficult of access or offering any facilities for defence, quitting this nulla however, and having assumed the course of the hills along whose steep summits it passes, the frontier becomes stronger and easily defensible, and following the ghauts by a deep and narrow valley continues of a similar character (with the exception of a very small space in the vicinity of Soobramuhi) till reaching the Coomarderry the stream of which from this point (No 33) commences to form the line of frontier.

DESCRIPTION.	Nos.	Angles.		Distance.			Objects.
		°	'	Miles.	Furlongs.	Yards.	
	34	327	44	,	4	130	
	35	302	40	,	7	166	
	36	271	25	,	5	"	Division of
	37	308	15	,	7	130	Yankul and Si-
	38	247	15	,	5	110	cily.
	39	279	15	,	4	110	
	40	319	15	1	,	27	Division of Si-
	41	270	40	,	5	60	cily and Kaum-
	42	217	10	,	6	110	pandy.
	43	264	15	,	4	"	Division of
	44	298	50	,	6	166	Kaumpandy and
	45	231	40	1	2	10	Kaiemuhni from
	46	283	45	,	6	"	this the Division
	47	4	15	1	1	30	of Kaiemuhni
	48	314	10	,	6	55	and Punjaj and
	49	266	10	1	,	27	from the 0-150
	50	314	40	,	4	55	of Punjaj and
	51	301	10	1	1	"	Bundady.
	52	317	28	,	4	110	Division of
	53	286	10	,	3	"	Bundady and
	54	299	,"	,	3	166	Kuddubudda.
	55	264	40	,	3	55	Division of
	56	297	30	,	2	166	Kuddubudda &
	57	276	10	1	,	"	Amraokoapudy.
	58	319	40	1	,	110	
	59	274	40	,	6	170	From this 0-5
	60	227	30	,	7	55	is the Division
	61	231	20	,	3	100	of Amra-
	62	205	40	,	3	110	okoapudy and
	63	273	,"	2	1	"	Bullary.
	64	305	40	,	4	55	From 0-6½ is
	65	,"	40	,	4	"	the Division of
	66	287	40	,	4	55	Bullary and
	67	33	45	,	7	110	Poottoor.
	68	265	50	,	7	"	
	69	319	28	1	3	"	From this 0-1.
	70	278	28	,	5	100	75 is the Division
	71	325	30	,	7	110	of Poottoor
	72	19	10	,	6	"	and Belloor.
	73	325	58	,	6	110	
	74	19	,"	,	4	166	
	75	338	,"	,	3	55	
	76	278	15	,	7	"	
	77	290	50	,	5	100	
	78	258	,"	,	5	100	
	79	278	40	,	7	100	

DESCRIPTION.	Nos.	Angles.		Distances.			Objects.
		°	,	Miles.	Furlongs.	Yards.	
Quitting the Nitkrawutti (the name which the Coomardary assumes after passing Copunungudday) the boundary passes along Pairnay holay till to 90, this stream is small, but has comparatively high banks. The numerous small valleys bordering it are well cultivated, but the country in its vicinity is of very irregular surface.	80	215	40	"	7	"	
	81	245	50	"	2	110	
	82	193	40	"	4	10	
	83	221	40	"	3	55	
	84	190	28	"	1	170	
	85	234	10	"	3	170	
	86	180	"	"	3	170	
	87	134	28	"	1	110	
	88	180	"	"	4	110	
	89	251	15	"	2	166	
	90	297	15	"	2	166	
	91	264	40	"	2	60	
	92	287	35	"	2	137	
	93	193	40	"	1	110	
	94	277	40	"	1	55	
	95	239	"	"	2	100	
	96	254	30	"	1	110	
	97	140	50	"	1	166	
	98	173	30	"	2	60	
	99	134	30	"	1	166	
	100	82	"	"	1	110	
	101	134	35	"	3	200	
	102	187	30	"	2	110	
	103	238	15	"	3	140	
	104	254	40	"	4	55	
	105	143	50	"	5	10	
	106	91	30	"	1	120	
	107	169	10	"	1	110	
	108	197	40	"	3	"	
	109	262	50	"	1	66	
	110	98	"	"	1	166	
	111	137	15	"	5	"	
	112	133	40	"	4	55	
	113	164	"	"	4	55	
	114	129	50	"	1	90	
	115	253	45	"	3	140	
	116	158	10	"	2	100	
	117	253	50	"	2	120	
	118	152	35	"	2	166	
	119	226	10	"	1	110	
	120	180	"	"	2	110	
	121	168	15	"	3	100	
	122	279	40	"	2	140	
	123	199	40	"	4	166	
	124	164	10	"	2	110	
	125	88	15	"	4	166	
	126	128	58	"	3	160	
	127	10	"	"	1	110	
	128	84	"	"	4	160	

DESCRIPTION.	Nos.	Angles.		Distances.			Objects.
		°	'	Miles.	Furlongs.	Yards.	
	129	191	40	"	2	160	
	130	167	30	"	1	"	
	131	278	50	"	2	"	
	132	256	50	"	5	"	
Leaving the river it proceeds over low and open slopes to 132.	133	180	"	"	2	"	
	134	190	15	"	4	110	
	135	151	"	"	2	10	
	136	169	10	"	3	180	
	137	229	50	"	2	100	
	138	180	"	"	1	"	
	139	139	15	"	2	27	
From this the boundary immediately ascends and having reached the summit proceeds over a steep and jungly ridge of hills to 142.	140	192	"	"	2	180	
From this the boundary continues with little exception to follow the summit of a rather low range of hills which are covered with a high jungle; this distance is crossed by one road and several foot paths; the numerous valleys formed by the small ridges extending themselves from this the great one, form intermediate valleys which are cultivated nearly from their rise.	141	135	58	"	4	"	
	142	180	"	"	2	27	
	143	125	"	"	6	55	
	144	268	"	"	1	110	
	145	312	55	"	2	55	
	146	279	"	"	1	110	
	147	302	50	"	2	60	
	148	262	50	"	1	166	
	149	180	"	"	2	27	
	150	243	"	"	2	166	
	151	334	35	"	4	27	
	152	31	30	"	2	100	
	153	334	"	"	5	20	
	154	277	15	"	2	27	
	155	339	"	"	3	"	
From the latter point the boundary commences to descend and passes over partly high and steep slopes partially open till crossing the Baudoo holay at 169.	156	300	45	"	2	165	
	157	236	10	"	1	115	
	158	205	35	"	1	165	
	159	275	35	"	6	"	
	160	233	5	"	4	110	
	161	180	"	"	4	"	
	162	217	35	"	2	115	
	163	278	"	"	3	165	
	164	265	58	"	5	110	
	165	263	45	"	4	110	
	166	225	"	"	3	5	
	167	255	10	"	3	190	
	168	288	5	"	4	"	
	169	248	40	"	5	165	

From the point where the boundary quits the Nittrawatti till reaching the Baudoo holay, it for a large part of this distance, runs along the summits of low ranges of hills. The forest with which they are covered however more than the elevation they present, would offer any difficulty which exists as to passing them, this distance it will be seen is crossed in numerous places, both by large roads and foot paths.—Indeed it (the boundary) is only partially covered by the hills on it, the immediate spaces between them giving a ready access to the interior.

DESCRIPTION.	No.	Angles.		Distances.			Objects.
		°	'	Miles.	Furlongs.	Yards.	
Leaving the Bandoor hollay the surface of the country becomes considerably flatter, the steep tops of the ridge just passed gives way to a flat table land whose rocky surface is quite devoid of jungle, the descent from this table into the cultivated valleys is short, but steep over the kind of country which has just been described, the boundary passes from 169 to 197, during this distance, it is every where to be passed with the utmost facility.	170	248	40	"	4	165	
	171	207	30	"	3	120	
	172	245	30	"	2	110	
	173	292	15	"	3	120	
	174	278	55	"	2	90	
	175	260	30	"	5	55	
	176	237	10	"	2	110	
	177	211	30	"	2	180	
	178	226	30	"	2	110	
	179	241	30	"	4	110	
	180	185	40	"	6	110	
	181	215	45	"	1	110	
	182	141	30	"	2	165	
	183	95	56	"	1	110	
	184	125	30	"	3	110	
	185	172	30	"	3	120	
	186	115	15	"	3	120	
	187	142	30	"	7	110	
	188	90	"	"	3	110	
	189	70	30	"	3	176	
	190	133	"	"	4	110	
	191	143	58	"	4	55	
	192	88	10	"	3	55	
	193	60	10	"	2	10	
	194	85	30	"	3	55	
Leaving the nulla which the boundary passes at the last mentioned point (197) it ascends and proceeds over a ridge of bare and somewhat steep slopes till to 210; this space is free from jungle and like the last one readily passed	195	41	30	"	2	55	
	196	18	45	"	4	55	
	197	"	"	"	2	5	
	198	43	10	"	2	5	
	199	29	25	"	3	190	
	200	88	58	"	1	55	
	201	128	48	"	6	110	
	202	114	"	"	3	200	
	203	166	30	"	3	55	
	204	111	58	"	5	55	
	205	71	45	"	2	120	
	206	6	15	"	4	55	
	207	36	"	"	2	55	
	208	78	58	"	2	110	
	209	114	"	"	2	110	
Quitting the last point the boundary proceeds over a ridge, partially covered with forest, considerably steeper than the former, and continues along its summits till to 214.	210	156	"	"	2	165	
From this it proceeds over low open slopes and	211	121	"	"	3	55	
	212	91	15	"	"	"	
	213	111	30	"	2	110	
	214	88	45	"	2	55	
	215	132	30	"	6	110	
	216	96	"	"	1	110	
	217	145	30	"	3	"	

DESCRIPTION.	Nos.	Angles.		Distances			Objects.
		°	'	Miles.	Furlongs	Yards.	
with some steepness towards the Puiswunni, reaches it at 221.	218	133	30	"	2	110	
The boundary having reached the Puiswunni at 221.	219	199	30	"	3	90	
	220	122	15	"	1	"	
	221	151	30	"	9	165	
From the point where the boundary quits the Baudoor holay till its falling into the Puiswunni, it is in almost every place to be passed without any kind of difficulty. Indeed for this distance it is quite factitious, runs over a country quite open, and is no where marked by natural limits.							
The boundary having reached the Puiswunni at 221, is marked by its stream till to 228, this river is here only a furlong broad, and being deep, and having high and precipitous banks is not to be passed during this distance.	222	224	15	"	1	190	
	223	198	15	"	3	110	
	224	219	35	"	5	200	
	225	187	"	"	3	165	
	226	144	45	"	2	"	
	227	222	58	"	"	200	
	228	139	"	"	1	"	
	229	112	10	"	2	170	
	230	88	45	"	4	55	
	231	58	45	"	3	110	
	232	91	15	"	4	90	
	233	55	30	"	3	120	
	234	76	15	"	2	110	
	235	107	"	"	6	60	
	236	80	30	"	3	165	
Leaving the Puiswunni the line of separation runs along a small nulla till to 233. Its low banks and shallow stream renders it easily passed in all places.	237	51	30	"	2	55	
	238	97	15	"	5	200	
	239	64	15	"	6	165	
	240	91	"	"	2	110	
	241	49	10	"	3	165	
	242	106	30	"	3	165	
	243	127	15	"	1	110	
	244	81	30	"	1	165	
	245	129	15	"	2	165	
	246	97	45	"	3	120	
	247	29	15	"	3	165	
	248	334	35	"	3	110	
	249	75	"	"	3	110	
	250	96	10	"	3	55	
	251	110	"	"	3	110	
Whence it rapidly descends, crosses the valley through which it had before passed, and ascends a steep and elevated top till to 250.	252	201	15	"	4	40	
	253	159	35	"	7	55	
	254	100	15	"	2	110	
	255	144	30	"	6	"	
	256	67	10	"	4	110	
Whence it proceeds along the summits of a high and jungly ridge till to 257.	257	95	45	"	7	100	

From this where the boundary falls into the Puiswunni till reaching the elevated top at 257, it passes over rather high and steep slopes, the greater part a thick forest; this portion of frontier is only crossed by a foot-path, and may be said to offer numerous obstacles to its being more generally traversed.

DESCRIPTION.	Nos.	Angles.		Distances.			Objects.
		°	'	Miles.	Furlongs.	Yards	
	258	180	"	"	2	165	
	259	137	45	"	3	"	
Quitting this point the last mentioned boundary descends with great steepness till to 263, the latter part having passed along the bed of a small nulla.	260	188	55	"	5	160	
	261	140	45	"	5	"	
	262	174	35	"	2	170	
	263	231	30	"	3	110	
	264	110	"	"	1	110	
	265	74	"	"	5	165	
	266	36	45	"	2	165	
	267	220	45	"	3	110	
Quitting it, it runs for some distance along low slopes, gradually however ascending to the high and jungly top at 271.	268	60	15	"	5	55	
	269	22	45	"	3	"	
	270	247	15	"	5	20	
	271	10	45	"	3	110	
	272	81	15	"	4	120	
Whence it runs along the crest of a high ridge to 274.	273	32	"	"	7	110	
	274	91	55	1	1	120	
From this it descends and falling into a small nulla passes along it till to 277.	275	117	10	"	3	"	
	276	31	45	"	1	110	
	277	83	30	"	4	110	
	278	290	15	"	2	"	
	279	177	30	"	2	120	Left 165 yds the point.
Quitting this it runs along the bed of a similar stream till to 283. The cultivation of Cullapooly borders on those nullas, but the Cauvery in their neighbourhood is high and steep.	280	177	30	"	1	110	
	281	177	30	"	1	"	Left 200 yds the point.
	282	177	30	"	2	"	
	283	177	30	"	1	10	
	284	177	30	"	5	"	
	285	148	40	"	5	"	
	286	206	45	"	7	110	Here join large nulla.
From the last point the boundary ascends with steepness to 285.	287	265	15	"	2	"	
	288	285	"	"	5	10	
	289	272	15	"	4	165	
From this top which is free from jungle, it descends and passing over numerous acclivities reaches a rather large nulla at 290. Along whose stream it passes till to 290, this nulla is rather large, has high banks but can be passed without difficulty.	290	305	58	"	2	"	
	291	254	30	"	1	120	
	292	274	"	"	5	20	
	293	237	10	"	2	"	
	294	284	30	"	2	10	
	295	204	"	"	1	20	
	296	245	40	"	3	55	
	297	180	"	"	2	30	
	298	139	"	"	2	"	
	299	185	"	"	2	"	

DESCRIPTION.	Nos.	Angles.		Distances.			Objects.
		°	'	Miles.	Furlongs.	Yards.	
Quitting it the line of division ascends one of its tributary streams to 302.	300	185	"	"	3	"	
	301	146	30	"	2	"	
	302	170	10	"	4	110	
	303	234	15	"	4	"	
	304	265	58	"	3	"	
Whence it passes into Purathuddy point at 306, the latter part being particularly high and steep.	305	214	30	"	1	165	Parathuddy point.
Thence it proceeds along a steep and elevated ridge to 304, this latter portion being quite open.	306	243	"	"	2	"	
A steep descent to 309 passing over a small nulla, at this place it passes a steep ridge to 311.	307	143	58	"	1	55	
And ascends another of a similar nature to 315, the whole of this latter space being a thick jungle.	308	96	15	1	1	"	
	309	178	"	1	1	165	Cross small nulla.
It continues along a steep and precipitous ridge to 319.	310	140	"	"	5	"	
Whence descending, it falls into a small nulla and continues along it till uniting with the large one at 322.	311	172	15	"	7	55	
Having united with the large nulla at 325 it proceeds along its bed to 325.	312	127	15	"	5	"	
	313	134	30	"	7	165	
	314	152	15	"	5	55	
	315	129	"	"	3	120	
	316	167	15	"	3	200	
	317	130	25	"	4	40	
	318	177	15	1	1	110	
	319	131	"	"	5	"	
	320	154	"	"	3	190	Here join large nulla, the division of Tawa Naad and Paudy Naku Naad.
	321	128	55	"	3	55	
	322	108	56	"	2	55	
	323	189	25	"	3	55	
	324	228	30	"	6	75	
	325	186	15	"	7	165	
	326	60	45	"	2	"	
	327	"	"	"	1	100	
	328	36	30	"	4	100	
	329	72	45	"	3	"	
This stream is here joined by one of equal magnitude along which the line of separation ascends to 334, these 2 nullae are about 300 feet broad with steep banks and an excessively stony bed.	330	104	"	"	2	110	
Quitting this last point it ascends for a short distance up a small rivulet, quitting it, it reaches a high top whence it proceeds for a short distance along a high ridge, but leaving its descent passes over a minor one to 342.	331	127	15	"	4	110	
	332	86	30	"	7	"	
	333	57	10	"	7	110	
	334	134	"	"	3	110	
	335	149	45	1	6	55	
	336	87	10	"	5	20	
	337	118	"	"	4	"	
	338	161	15	"	4	100	
	339	180	"	"	2	110	
	340	101	30	"	4	15	
	341	131	30	"	3	55	
	342	209	45	"	3	40	
	343	158	30	"	2	100	
	344	205	"	"	2	"	

The last portion of boundary runs through a thick forest over steep ridges or elevated tops, it is only crossed in one place, and in that alone cannot be considered as at all passable.

DESCRIPTION.	Nos.	Angles.		Distance.			Objects.
		°	'	Miles.	Furlongs	Yards.	
From this last point it passes for a very short way along a small nulla but soon leaving it it ascends with steepness to 347.	345	175	45	"	4	70	
	346	137	10	"	7	55	
	347	115	"	"	4	165	
	348	201	10	"	4	55	
	349	130	30	"	4	55	
	350	104	15	"	3	200	
	351	68	30	"	2	55	
	352	171	45	"	5	20	
	353	144	"	"	3	60	
	354	236	45	"	3	120	
	355	129	30	"	4	200	
Quitting this it descends with equal rapidity, passes various small nullas and secondary ridges reaching after a rugged and irregular course, the high top at 360.	356	106	58	"	3	"	
	357	154	15	"	1	40	
	358	82	10	"	2	100	
	359	133	30	"	1	165	
	360	77	"	"	1	100	A high Top.
From whence it passes a long ridge to 362.	361	149	50	"	4	165	
	362	159	"	"	3	165	
	363	87	30	"	4	"	
	364	109	"	"	6	"	
Whence it descends along the side of a small ridge to 366 ascending steeply to 367.	365	160	15	"	3	"	
	366	105	45	"	1	"	
	367	34	30	"	4	100	
	368	181	45	"	3	100	
	369	110	"	1	1	15	
	370	72	45	"	1	110	
Leaving this top it falls into a small rivulet, along which it passes to 373.	371	137	40	"	2	15	
	372	70	"	"	1	130	
When uniting with the Oodumbari holay it runs along its bed to 379, the nulla is about a 100 feet broad has a rapid stream of water and a very rocky bed.	373	109	50	"	1	130	Here join the Oodumbari holay division of Paudy Naku Naad and Kuddithi Naad.
	374	129	"	"	6	140	
	375	173	"	"	5	110	
	376	137	30	"	3	110	
	377	180	"	"	2	"	
	378	130	30	"	2	"	
Quitting the Oodumbari holay, the boundary passes a ridge to 381.	379	101	"	"	4	"	
	380	127	"	"	5	20	
	381	88	"	"	3	15	Division of Kuddithi Naad and Beypur Naad.
	382	142	30	"	5	60	
	383	74	"	"	1	165	
	384	39	5	"	4	"	
	385	64	15	"	4	165	
	386	99	30	"	2	70	
	387	125	"	"	1	160	
	388	171	"	"	5	10	
Crossing a small nulla it proceeds over various other ridges of irregular elevation till reaching the Kull holay at 392.	389	98	45	"	2	170	
	390	177	10	"	4	55	
	391	124	30	"	2	50	
	392	46	30	"	2	55	Meets the Kull holay.

CODUGU SURVEY.

111

DESCRIPTION.	Nos.	Angles.		Distances.			Objects.
		.	.	Miles.	Perches.	Yards.	
From thence it runs along its bed to 397 where it falls into the Burrapoly along whose stream it passes to 409. Both those Nullahs are remarkable for the steepness of their banks, and the ruggedness of their bottoms, their breadth is similar, and may be about 200 feet broad.	398	112	"	"	4	100	
	394	128	30	"	2	110	
	395	114	30	"	4	"	
	396	85	"	"	4	10	Mets the Burrapoly.
	397	134	30	"	3	"	
	398	74	"	"	3	"	
	399	109	"	"	3	110	
	400	61	10	"	2	"	Division of Baitnahal and Bettish Nead.
	401	105	"	"	1	165	
	402	73	30	"	2	100	
	403	127	"	"	1	165	
	404	63	"	"	1	165	
	405	110	28	"	1	100	
	406	60	30	"	1	150	
	407	127	45	"	1	160	
	408	76	30	"	4	165	
	409	117	30	"	2	165	Division of Bettish and Murray Nead.
	410	174	30	"	4	55	
	411	188	"	"	6	60	
	412	162	40	"	4	"	
	413	180	"	"	4	"	
	441	183	45	"	2	110	
	415	158	30	"	2	10	
	416	116	30	"	5	150	
Quitting the Burrapoly the boundary passes over two exceedingly steep and elevated ridges reaching the summits of the ghat at 418. It passes along them to 419.	417	156	10	"	2	27	
	418	193	"	"	7	70	
	419	133	"	1	3	120	
	420	161	30	"	3	70	
	421	163	"	"	3	"	
	422	141	10	"	5	170	
	423	196	30	"	4	120	
	424	116	10	1	1	55	
	425	148	45	"	2	165	
	426	180	"	"	2	55	
	427	201	30	"	3	48	
	428	120	35	"	3	150	
	429	148	45	"	3	150	
	430	82	"	"	4	"	
	431	105	45	"	4	"	
	432	138	56	"	4	150	
	433	115	56	"	2	200	
	434	81	15	"	5	140	
	435	127	30	"	3	110	
	436	106	35	"	3	130	
	437	9	15	"	1	170	
	438	46	5	"	4	110	
Quitting the point where the 3 boundaries unite the line separating Codugu from	439	78	15	3	2	60	
	440	120	30	"	1	60	

The last portion of the boundary it will be seen, runs with but little exception along the foot of the western ghauts passing for the whole distance through a forest of uncommon density, and invariably over steep, and high ridges; it is scarcely necessary to remark that this portion of frontier is of great natural strength and easily defensible throughout the wall formed by this range of mountains presenting a barrier that can only be passed at the few points where the roads may traverse it.

DESCRIPTION.	Nos.	Angles.		Distances.			Objects.
		°	'	Miles.	Furlongs.	Yards.	
Wynaad passes immediately along the top of a steep ghaut, till reaching 448, this distance presents to the south a steep and precipitous wall, to the N. an elevated Table the highest top of which is the hill of Brumagerry.	441	100	15	"	7	110	Division of Murray and Tawullugayray Naad.
	442	112	58	"	6	70	
	443	87	"	"	2	150	
	444	105	30	"	4	55	
	445	85	15	"	2	165	
	446	123	"	"	5	120	
From the last point branches off a high and steep ridge of hills; along the summit of this range the boundary continues to pass; their elevations are very great to 466.	447	58	15	"	3	110	
	448	105	15	"	4	110	
	449	27	58	"	5	120	
	450	57	15	"	2	120	
	451	91	30	"	3	20	
	452	71	58	"	3	60	
From this the range gradually becomes flatter, the boundary still continuing to pass along it till to 461, this latter portion runs through jungle, the previous part however of the Wynaad Boundary (that is from 441 to 456) runs over hills comparatively free from forest; from this point the boundary descends and again ascends to a top at 462; from this last point it gradually falls to 464 when passing a small Nullah, it proceeds over a low jungly slope joining the Kaydeegay Holay at 467 this being the point of division between the Mysore, Wynaad and Codugu countries.	453	111	"	"	2	150	
	454	139	30	"	2	100	
	455	90	30	"	1	4	
	456	37	45	"	2	60	
	457	52	"	"	2	150	
	458	38	30	"	5	70	
	459	88	10	"	1	55	
	460	58	15	"	1	70	
	461	48	15	1	3	40	
	462	75	15	"	5	110	
	463	101	45	"	4	165	Pass small Nulla.
	464	53	30	"	6	"	
	465	29	30	"	3	165	Moogooda X.
	466	86	45	"	3	110	
	467	60	30	"	1	110	

The whole of the Wynaad boundary may be said to pass along the crest of a high ridge of hills, and is consequently from this circumstance extremely strong, and is rendered still more so by the rugged nature of the country in its vicinity.

From the minute nature of the above description but little more need be said with regard to the boundary. Considered in a military light, it will be seen, that it is covered by Hills with little exception; about one third of its extent, that is, from the point where the Wynnaad and Mysore boundaries unite till passing the village of Beendeeduker; from this gradually becoming weaker, it may be said to be quite open till meeting the Nittrawutti or Coomardarry; the whole extent of that river though presenting a good natural boundary, cannot from its confined breadth be considered in every place a very defencible one—leaving it hills again cover the line of demarcation till it meets the champaign district of Yailsowra; from this the frontier is entirely open till the point where it joins the Cauvery—that river though a tolerably good barrier is still less so than the thick forest, which commencing from where the boundary quits its stream continues without interruption till to the Kaydeegay Holay; the point, as has just been observed, where the Hills may be said to commence.

APPENDIX.

TO

PART I.

TRIANGLES

The Triangular operations of Colonel Lambton in connecting the two coasts of the Peninsula having been carried through Codu-gu, the subsequent series will necessarily be of minor consideration, such however became absolutely requisite as those above alluded to were of too great magnitude to admit of their being useful in taking up the geographical detail of the country. The accompanying Triangles will therefore be viewed as only filling up the primary ones which served as their basis, and for the purposes that have been stated, their amount has been limited to such a number as were found sufficient for facilitating the operation of the Topographical Survey. The great magnitude of the Primary Triangles rendered it difficult in some measure to determine, with that nice accuracy that could be desired, some of the intermediate ones, as the Telescope of the ordinary Theodolite, is not sufficiently powerful to cut with precision, objects at so considerable a distance; each side however has been separately determined from distinct data, and the general results were found in every instance of sufficient correctness, to answer in a satisfactory manner all the purposes for which they were intended.

TADIANDAMALE AND BETTADIPOOR—5·3015991 200262

1	Tadiandamale ...	31	36	"	5·2854876	192969
	Maullimby ...	77	57	"	5·0305950	107299
	Bettadipoor ...	70	27	"		

SOOBRAMUHNI AND BETTADIPOOR—5·2323200 170734

2	Soobramuhni ...	26	37	"	4·8884063	77340
	Maullimby ...	134	33	"	5·0307473	107336
	Bettadipoor ...	18	50	"		

BETTADIPOOR AND TADIANDAMALE—5·3015991 200262

3	Bettadipoor ...	39	8	"	5·1211203	132166
	Cotay Betta ...	100	21	"	5·1088407	128482
	Tadiandamale ...	40	29	"		

TADIANDAMALE AND SOOBRAMUHNI—5·2141293 163730

4	Tadiandamale ...	14	19	29	5·109149	128543
	Cotay Betta ...	126	35	"	4·7028565	50449
	Soobramuhni ...	39	5	31		

SOOBRAMUHNI AND BETTADIPOOR—5·2323200 170734

5	Soobramuhni ...	34	26	"	4·7040011	505826
	Cotay Betta ...	133	4	"	5·1210869	132156
	Bettadipoor ...	12	30	"		

COTAY BETTA AND BETTADIPOOR—5·1210869 132156

6	Cotay Betta ...	54	2	"	4·8380305	68870
	Maullimby ...	94	40	"	5·0305701	107317
	Bettadipoor ...	31	18	"		

MAULLIMBY AND BETTADIPOOR—5.0306701 107317.

7	Maullimby... ...	49	10	"	4.8849508	76727
	Codergurrahully...	85	23	"	4.9109563	81462.2
	Bettadipoor... ...	45	27	"		

COTAY BETTA AND BETTADIPOOR—5.1210869 132156

8	Cotay Betta... ...	20	27	"	4.7543025	56794
	Codergurrahully...	145	27	"	4.9107182	81417
	Bettadipoor... ...	14	6	"		

MAULLIMBY AND COTAY BETTA—4.8380305 68870

9	Maullimby... ...	39	51	"	4.8876237	77201.1
	Soobramuhni ...	61	8	"	4.7024615	50403
	Cotay Betta... ...	79	1	"		

BETTADIPOOR AND SOOBRAMUHNI—5.2323200 170734

10	Bettadipoor... ...	26	36	"	4.9087025	81040.6
	Codergurrahully...	133	8	"	5.0201789	104756
	Soobramuhni ...	20	16	"		

MAULLIMBY AND COTAY BETTA—4.8384902 68948

11	Maullimby... ...	45	32	"	4.8844758	76643
	Codergurrahully...	60	3	"	4.7543040	56794
	Cotay Betta... ...	74	25	"		

CODERGURRAHULLY AND MAULLIMBY—4.8849508 76727.

12	Codergurrahully...	60	3	"	4.8389652	69018.6
	Cotay Betta ...	74	25	"	4.7547062	56484.8
	Maullimby... ...	45	32	"		

CODERGURRAHULLY AND MAULLIMBY—48849503 767274

13	Codgurrahully...	47	45	"	50203572	104799
	Soobramuhni ...	46	52	"	48911277	77826.5
	Maullimby ...	85	23	"		

MAULLIMBY AND BETTADIPOOR—50305050 107298

14	Maullimby ...	112	39	"	46649827	46236.2
	Hurrugul ...	48	31	"	51211697	132181
	Bettadipoor ...	18	50	"		

BETTADIPOOR AND COTAY BETTA—51210869 132153

15	Bettadipoor ...	12	29	"	51211550	132177
	Hurrugul ...	83	43	"	44594101	28734
	Cotay Betta ...	83	48	"		

CODERGURRAHULLY AND MAULLIMBY—48849508 767274

16	Codergurrahully...	36	44	"	48436203	69702
	Hurrugul ...	79	47	"	40685597	40618.6
	Maullimby ...	63	29	"		

BETTADIPOOR AND HURRUGUL—51211697 132181

17	Bettadipoor ...	26	37	"	49084888	81000.6
	Codergurrahully...	122	7	"	48445997	69199
	Hurrugul ...	31	16	"		

MAULLIMBY AND COTAY BETTA—48380305 68885

18	Maullimby ...	17	57	"	46655622	46298
	Hurrugul ...	132	14	"	44578214	28696
	Cotay Betta ...	29	49	"		

COTAY BETTA AND MAULLIMBY—48384902						68943
19	Cotay Betta	...	44	15	"	4.6360564
	Koondhully...	...	97	15	"	4.6861535
	Maullimby...	...	38	30	"	48546
KOONDHULLY AND COTAY BETTA—46360564						43257
20	Koondhully...	...	68	9	"	4.4805531
	Kalkundoor...	...	70	36	"	4.6290628
	Cotay Betta...	...	41	15	"	42566
BETTADIPPOOR AND COTAY BETTA—51210839						132153
21	Bettadipoor...	...	18	2	"	5.0599268
	Kalkundoor	...	104	56	"	4.4269252
	Cotay Betta...	...	57	2	"	42357
MAULLIMBY AND KOONDHULLY—4CS61335						48546
22	Maullimby...	...	53	50	"	4.4227375
	Kalkundoor	...	117	8	"	4.4815859
	Koondhully	...	29	2	"	30310
MAULLIMBY AND BETTADIPPOOR—50305950						107299
23	Maullimby...	...	99	21	"	4.4290252
	Kalkundoor	...	67	18	"	5.0598019
	Bettadipoor...	...	13	21	"	114763
COTAY BETTA AND MAULLIMBY—48384902						68943
24	Cotay Betta...	...	29	49	"	4.4578300
	Hurrugul	...	132	14	"	28690.5
	Maullimby...	...	17	57	"	46298

KOONDHULLY AND MAULLIMBY—46861535 48546

25	Koondhully ...	72	17	"	42320045	17061
	Hurrugul ...	87	12	"	46654872	46290
	Maullimby ...	20	33	"		

BETTADIPPOOR AND MAULLIMBY—50305050 107299

26	Bettadipoor ...	18	50	"	51201690	132182
	Hurrugul ...	48	31	"	43649827	462362
	Maullimby ...	112	39	"		

MAULLIMBY AND BETTADIPPOOR—50305050 107229

27	Maullimby ...	133	14	"	46817107	48385
	Koondhully ...	32	12	"	51674824	147056
	Bettadipoor ...	14	4	"		

MAULLIMBY AND BETTADIPPOOR—50306083 107317

28	Maullimby ...	61	41	"	50394955	109320
	Noorkull ...	58	11	"	50460306	111181
	Bettadipoor ...	60	8	"		

KALKUNDOOR AND BETTADIPPOOR—50598624 114779

29	Kalkundoor ...	64	29	"	49530822	897599
	Noorkull ...	68	44	"	50459173	111152
	Bettadipoor ...	46	47	"		

HURRUGUL AND BETTADIPPOOR—51211559 132177

30	Hurrugul ...	56	26	"	49446688	880377
	Noorkull ...	82	16	"	50458955	111146
	Bettadipoor ...	41	18	"		

COTAY BETTA AND BETTADIPOOR—51211203 132166

31	Cotay Betta ...	56	5:	"	4.8060782	63985
	Noorkull ...	94	9	"		
	Bettadipoor ...	28	52	"	5.0457698	111114

COTAY BETTA AND TADIANDAMALE -51088407 128482

32	Cotay Betta ...	43	20	"	4.8058745	63955
	Noorkull ...	108	31	"		
	Tadiandamale ...	28	9	"	4.9087117	93049

TADIANDAMALE AND SOOBRAMUHN—52141293 163730

33	Tadiandamale ...	22	16	30	4.9296028	85036
	Muddukayray Tree...	136	53	"		
	Soobramuhni ...	20	45	30	4.9537741	90944

SOOBRAMUHN AND COTAY BETTA—47023616 50392

34	Soobramuhni ...	18	17	"	4.9584396	90874
	Muddukayray Tree...	20	11	"	4.6610478	45819.2
	Cotay Betta ...	141	32	"		

COTAY BETTA AND TADIANDAMALE—51091497 128543

35	Cotay Betta ...	41	53	"	4.6611101	45825.8
	Muddukayray Tree...	157	10	"		
	Tadiandamale ...	7	57	"	4.9297356	85062

COTAY BETTA AND NOORKULL—48058763 639553

36	Cotay Betta ...	28	28	"	4.6651961	46259
	Muddukayray Tree...	108	6	"		
	Noorkull ...	43	26	"	4.5063833	32091

SOOBRAMUHNI AND BETTADIPOOR—5:2323200

37	Soobramuhni ...	40	00	10	5.0568603	113968
	Noorkull ...	98	42	"	5.0454136	111023
	Bettadipoor ...	41	17	50		

TADIANDAMALE AND MUDDUKAYRAY TREE—4:9296092 85049

38	Tadiandamale	20	3	20		
	Noorkull ...	65	12	40	4.9701672	93301.3
	Muddukayray	94	44	"	4.5069513	32138
	Tree...					

KOONDHULLY AND MAULLIMBY—4:6861535 48546

39	Koondhully	129	30	"	4.4668973	29302
	Soorlaby Peak ...	31	54	"	4.8505593	70885
	Maullimby ...	18	86	"		

MULLIMBY AND BETTADIPOOR—5:0305450 107286

40	Maullimby ...	114	36	"	4.8503276	70848
	Soorlaby Peak ...	40	11	"	5.1795035	151183
	Bettadipoor ...	25	13	"		

KOONDHULLY AND BETTADIPOOR—5:1516117 145040

41	Koondhully ...	96	48	"	4.4668528	29299
	Soorlaby Peak ...	72	7	"	5.1700532	147929
	Bettadipoor ...	11	5	"		

KOONDHULLY AND KALKUNDOOR—4:4810698 30274

42	Koondhully	100	21	"	4.4660665	29246
	Soorlaby Peak ...	40	39	"	4.6600730	45716.8
	Kalkundoor ...	39	"	"		

MAULLIMBY AND BETTADIPPOOR—50306686

107317

43	Maullimby...	84	58	"	5.2602071	182057
	Payroor ...	31	46	"	5.3076242	203060
	Bettadipoor ...	63	16	"		

COTAY BETTA AND BETTADIPPOOR—51212473

132204

44	Cotay Betta	110	30	"	5.0598090	114764
	Payroor ...	37	33	"	5.3078943	203176
	Bettadipoor ...	31	57	"		

SOOBRAMUHN AND TADIANDAMALE—52141293

45	Soobramuhni ...	33	29	31	5.0566958	113945
	Noorkull ...	104	02	"	4.9690855	93129.1
	Tadiandamale ...	42	28	29		

COTAY BETTA AND TADIANDAMALE—51089437

128512

46	Cotay Betta...	71	11	"	5.0341828	108188
	Seedasweer...	61	15	"	5.1422255	138748
	Tadiandamale ...	47	34	"		

MAULLIMBY AND TADIANDAMALE—52854876

192969

47	Maullimby...	45	42	"	5.0836039	121228
	Seedasweer ...	95	36	"	5.1422919	138769
	Tadiandamale ...	38	42	"		

COTAY BETTA AND TADIANDAMALE—51083437

128334

48	Cotay Betta...	33	6	"	4.9571933	90613
	Tha'oor ...	103	39	"	4.8586604	72221.5
	Tadiandamale ...	43	15	"		

SOOBRAMUHN AND TADIANDAMALE—52141293 163730

49	Soobramuhni ...	19	10	"	5.0266869	106388
	Tha'oor ...	131	57	"	4.8590085	72278.5
	Tadiandamale ...	28	53	"		

TADIANDAMALE AND SEEDASWEER—51422919 138768

50	Tadiandamale ...	90	49	"	4.8586214	72214
	Tha'oor ...	65	52	"	5.1891103	154564
	Seedasweer...	27	19	"		

BETTADIPOOR AND NOORKULL—50464717 111294

51	Bettadipoor ...	25	37	"	4.8122514	64901
	Seedasweer...	126	23	"	4.7764687	59768
	Noorkull...	28	"	"		

MAULLIMBY AND NOORKULL—50397234 109578

52	Maullimby...	29	23	"	5.0835811	121221
	Seedasweer...	64	25	"	4.7753046	59608
	Noorkull...	86	12	"		

CODERGURRAHULLY AND BETTADIPOOR—49108324 81439

53	Codergurrahully...	52	46	"	4.7226833	52806
	Seedasweer...	86	53	"	4.8124855	64936
	Bettadipoor...	40	21	"		

MAULLIMBY AND CODERGURRAHULLY—4.8849508 767273

54	Maullimby...	16	52	"	5.0837788	121277
	Seedasweer...	24	57	"	4.7224282	52775
	Codergurrahully...	138	11	"		

BETTADIPPOOR AND COTAY BETTA—51211203 132166

55	Bettadipoor ...	54	27	"	4.8129334	65003
	Seedasweer...	96	17	"	5.0331525	107932
	Cotay Betta...	29	16	"		

MAULLIMBY AND BETTADIPPOOR—50305950 107298

56	Maullimby...	32	17	"	5.0837519	121269
	Seedasweer...	61	56	"	4.8125571	649467
	Bettadipoor...	85	47	"		

SEEDASWEER AND TADIANDMALE—51422919 138768

57	Seedasweer...	28	26	"	5.1430600	139015
	Baingoor ...	75	35	"	4.8339181	68221
	Tadiandamale ...	75	59	"		

TADIANDAMALE AND NOORKULL—49687677 93061

58	Tadiandamale ...	56	32	"	4.8334659	68150
	Baingoor ...	77	46	"	4.9000167	794359
	Noorkull ...	45	42	"		

BETTADIPPOOR AND TADIANDAMALE—53015991 200262

59	Bettadipoor ...	19	53	"	5.2716031	186897
	Baingoor ...	91	12	"	4.8333065	68125
	Tadiandamale ...	58	55	"		

COTAY BETTA AND BETTADIPPOOR—51211203 132166

60	Cotay Betta ...	122	48	"	5.0146955	110840
	Sayrungaul ...	31	21	"	5.3294681	213534
	Bettadipoor...	25	51	"		

COTAY BETTA AND CODERGURRAHULLY—47544859 56818

61	Cotay Betta...	102	21	"	50443099	110839
	Sayrunaul ...	24	17	"	51302128	134962
	Codergurrahully...	53	22	"		

SOOBRAMUHNI AND THA'OR—50266869 106337

62	Soobramuhni ...	12	11	"	47391813	54850
	Moodapaudee ...	155	26	"	47322185	53978
	Tha'or ...	12	23	"		

SOOBRAMUHNI AND COTAY BETTA—47026545 50426.0

63	Soobramuhni ...	70	26	"	47389214	54817
	Moodapaudee ...	51	24	"	47838814	60799
	Cotay Betta ...	58	10	"		

THA'OR AND COTAY BETTA—49571933 90613.6

64	Tha'or ...	40	41	"	47322884	53987
	Moodapaudee ...	104	"	"	47844554	60877
	Cotay Betta ...	35	19	"		

COTAY BETTA AND THA'OR—49571933 90613.6

65	Cotay Betta ...	16	10	"	51776446	130537
	Purruthuddy ...	21	40	"	48346441	68335
	Tha'or ...	12	10	"		

THA'OR AND MOODAPAUDY—47322185 539782

66	Tha'or ...	101	50	"	48340882	68247
	Purruthuddy ...	33	40	"	49790974	95301
	Moodapaudy ...	44	30	"		

COTAY BETTA AND SOOBRAMUHNI—47026545 50426

67	Cotay Betta ...	43	2	"	50390408	109406
	Chokaudee...	25	22	30	49047163	80300
	Soobramuhni ...	111	35	30		

THA'OR AND SOOBRAMUHNI—50266869 106337

68	Tha'or ...	47	48	"	49395358	87003·3
	Chokaudee...	78	49	"	49047165	80300
	Soobramuhni ...	53	23	"		

TADIANDAMALE AND SOOBRAMUHNI—5·2141293 163730

69	Tadiandamale ...	28	45	"	52021697	159283
	Chokaudee...	78	42	"	49047658	80309
	Soobramuhni ...	72	33	"		

MOODAPAUDEE AND THA'OR—47322185 53978·2

70	Moodapaudee ...	108	35	"	47258167	53188
	Chokaudee...	36	"	"	49397445	87045
	Tha'or ...	35	25	"		

THA'OR AND PURRUTHUDDY—48349635 68291

71	Tha'or ...	66	25	"	49393087	86958·
	Chokaudee...	46	23	"	49367648	86449·9
	Parruthuddy ...	67	12	"		

COTAY BETTA AND THA'OR—49571933 90613·6

72	Cotay Betta ...	50	27	"	50393877	109493
	Chokaudee...	53	27	"	49393887	86973·
	Tha'or ...	76	6	"		

MEMOIR OF THE

THA'OR AND CHOKAUDEE—49394943 86995

73	Tha'or...	66	25	"	4.8345491	68320.2
	Purruthuddy	67	12	"	4.9369504	86687.1
	Chokaudee...	46	23	"		

CHOKAUDEE AND MOODAPAUDEE—47257694 53182.5

74	Chokaudee	82	24	"	4.9381612	86728
	Purruthuddy	33	29	"	4.9802389	95551
	Moodapaudee	64	7	"		

SOOBRAMUHNI AND CHOKAUDEE—49047163 803001

75	Soobramuhni	28	36	"	5.1705757	148107
	Purruthuddy	26	21	"	4.9375328	86603
	Chokaudee...	125	3	"		

SOOBRAMUHNI AND CHOKAUDEE—49047163 803001

76	Soobramuhni	41	12	"	4.7393770	54875.3
	Moodapaudee	95	59	"	4.7257694	53182.
	Chokaudee...	42	49	"		

THA'OR AND CHOKAUDEE—49394793 86992

77	Tha'or...	36	36	"	4.5991430	89732.2
	Payrahjee	120	8	"	4.7779438	59971.3
	Chokaudee...	23	16	"		

THA'OR AND MOODAPAUDEE—47322884 53986.9

78	Tha'or ...	72	1	"	4.5986969	39691
	Payrahjee ...	65	51	"	4.7503136	56274.7
	Moodapaudee ...	42	8	"		

CHOKAUDEE AND MOODAPAUDEE—47257694 53182·5

79	Chokaudee... ...	59	16	30	4·7786837	60073·6
	Payrahjee	54	15	30	4·7507071	56305·7
	Moodapaudee	66	28	“		

KUNDUDDUKUMALE AND GOOMPAY—5·1008735 126146

80	Kunduddukumale...	48	46	“	4·9816382	95860·4
	Maddhow... ...	82	22	“	4·9809750	95713·1
	Goompay... ...	48	52	“		

BELLANAAD AND KUNDUDDUKUMALE—5·1252315 133429

81	Bellanaad	39	20	39	4·7630066	57957·1
	Maddhow... ...	118	8	“	4·9·19291	95924·4
	Kunduddukumale...	22	31	21		

GOOMPAY AND BELLANAAD—47734631 59355·8

82	Goompay... ...	34	53	“	4·9812614	95777·
	Maddhow... ...	35	46	“	4·7640148	58078·
	Bellanaad	109	21	“		

CHOKAUDEE AND PAYRAHJEE—47783105 60022

83	Chokaudee... ...	90	51	“	4·7997317	63056·8
	Maddhow... ...	43	11	“	4·9429939	87698·8
	Payrahjee... ...	45	58	“		

THA'OR AND CHOKAUDEE—49394793 86992

84	Tha'or... ...	27	3	33	5·1026393	126660·
	Maddhow	38	48	27	4·8003458	63146·
	Chokaudee... ...	114	8	“		

MADDHOW AND BELLANAAD—47635559 58017

85	Maddhow	145	"	"	47995582	630316
	Chokaudee	16	45	6	50624163	115546
	Bellanaad	18	14	54		

BELLANAAD AND KUNDUDDUKUMALE—51252515 133429

86	Bellanaad	57	34	"	50630692	115629
	Chokaudee... ...	68	37	43	50825416	120932
	Kunduddukumale.	53	48	17		

BULLAMALE AND GOOMPAY—47402837 54990

87	Bullamale	76	3	1	49670277	92689
	Maddhow... ...	35	53	45	49808917	95695
	Goompay	70	3	14		

GOOMPAY AND BULLAMALE—47402853 54990·2

88	Goompay... ...	61	16	"	50920700	123785
	Kulbetta... ...	26	21	"	50359793	108637
	Bullamale... ...	92	23	"		

GOOMPAY AND MADDHOW—49811161 95745

89	Goompay... ...	8	47	"	50927089	123796
	Kulbetta	26	37	"	45136539	32632·8
	Maddhow... ...	144	36	"		

BELLANAAD AND GOOMPAY—47734631 59355·8

90	Bellanaad	133	34	"	48765232	75253
	Kulbetta	20	19	"	50929549	123866
	Goompay	26	7	"		

MADDHOW AND BELLANAAD—47635553

58017

91	Maddhow...	108	50	"	45135623	32625.1
	Kulbetta ...	46	55	"	48761107	75181.4
	Bellanaad...	24	15	"		

BELLANAAD AND GOOMPAY—47734631

59355.8

92	Bellanaad ...	76	35	"	46708053	46860
	Niddoopoolly ...	60	11	"	48231158	66545
	Goompay ...	43	14	"		

BULLAMALE AND GOOMPAY—47402853

549902

93	Bullamale...	57	26	42	48980519	79077.3
	Niddoopoolly ...	44	11	4	48228343	66502
	Goompay ...	78	22	14		

MADDHOW AND PAYRHJEE—49429939

87693.8

94	Maddhow ...	66	48	"	46787378	47724.1
	Uddoor ...	80	43	"	59120991	81676.9
	Payrahjee ...	32	29	"		

MADDHOW AND KULBETTA—45135905

32628

95	Maddhow...	146	7	"	46769896	47532.4
	Uddoor ...	13	42	"	48853863	75804.5
	Kulbetta ...	20	11	"		

PURUTHNDY AND MADDHOW—49329855

85698.9

96	Puruthbuddy ...	31	52	"	47657830	58315.3
	Uddoor ...	107	44	"	46767157	47502.4
	Maddhow...	40	24	"		

MADDHOW AND UDDOOR—46768490

47517

97	Maddhow	51	29	"	44991505	31561
	Niddoopolly ...	86	58	"	45709018	372307
	Uddoor ...	41	53	"		

MADDHOW AND BELLANAAD—47635553

58017

98	Maddhow...	53	34	"	44976301	314507
	Niddoopolly ...	93	41	"	46700055	467741
	Bellanaad...	32	46	"		

MADDHOW AND KUNDUDDUKUMALE—49817824

95892

99	Maddhow	27	29	"	49329855	857029
	Purruthuddy ...	89	11	"	41459893	442577
	Kunduddukumale,	63	20	"		

THA'OR AND SEEDASWEER—51967839

157320

100	Tha'or...	27	05	"	51345731	136324
	Veerajenderpett }	105	35	"	48222741	76256
	Tree... ...	56	35	"		
	Seedasweer ...					

NOORKULL AND SEEDASWEER—47758506.

59683

101	Noorkull...	79	"	"	47798080	60229
	Veerajenderpett }	50	11	"	48823810	76274
	Tree... ...	50	49	"		
	Seedasweer ...					

BETTADIPPOOR AND TADIANDAMALE—53015991

200262

102	Bettadipoor... ...	51	45	"	52883583	194249
	Brummagerry ...	65	55	30	52361675	172253
	Tadiandamale ...	62	19	30		

NOORKULL AND BETTADIPPOOR—50459446

111159

103	Noorkull ...	83	17	45	5.2375709	17281.0
	Brummagerray ...	34	38	"	5.2883698	194254
	Bettadipoor ...	62	4	15		

TADIANDAMALE AND NOORKULL—49687117

93049

104	Tadiandamale ...	74	42	"	5.2361958	172264
	Brummagerray ...	31	17	"	5.2376461	172840
	Noorkull ...	74	1	"		

BETTADIPPOOR AND BRUMMAGERRAY—5.2883677

194253

105	Bettadipoor ...	20	37	"	5.2671675	184998
	Beerunnauny ...	87	20	"	4.8355214	68473.3
	Brummagerray ...	72	3	"		

BETTADIPPOOR AND NOORKULL—50459446

111159

106	Bettadipoor ...	41	27	15	5.2672523	185034
	Beerunnauny ...	35	53	"	5.0988172	125550
	Noorkull ...	102	39	45		

BETTDIPOOR AND BRUMMAERRAY—5.2883677

194253

107	Bettadipoor ...	36	35	"	4.8128328	64987.9
	Seedasweer ...	123	10	"	5.1680654	147293
	Brummagerray ...	15	15	"		

TADIANDAMALE AND SEEDASWEER—5.1422580

138758

108	Tadiandamale ...	55	14	"	5.2363140	172311
	Brummagerray ...	50	44	"	5.1679970	1472330
	Seedasweer ...	74	2	"		

SEEDASWEER AND BRUMMAGERRAY—5·1680288 147241

109	Seedasweer ...	27	34	20	5·0928478	123836
	Beerunnauny ...	95	36	"	4·8355620	684797
	Brummagerry ...	56	49	"		

NOORKULL AND BEERUNNAUNY—5·0988172 125550

110	Noorkull	19	20	"	5·2373849	172737
	Brummagerry ...	37	27	"	4·8347756	68356
	Beerunuauny ...	123	13	"		

BRUMMAGERRAY AND BEERUNNAUNY—4·8352865 684363

111	Brummagerry ...	37	43	"	4·9532199	897891
	Moogootagayray ...	47	33	"	4·7402814	549897
	Beerunuauny ...	92	42	"		

TADIANDAMALE AND BRUMMAGERRAY—5·2361516 172247

112	Tadiandamale ...	26	9	"	5·0281678	106700
	Moogootagayray ...	122	15	30	4·9531163	897669
	Brummagerry ...	31	35	30		

VEERAJENDERPETT TREE AND SEEDASWEER—4·8823253 76265

113	Veerajenderpett }	64	46	"	4·5690719	37074
	Tree	86	13	"	4·8397194	691387
	Moogootagayray ...	29	1	"		

TADIANDAMALE AND SEEDASWEER—5·1422580 138758

114	Tadiandamale ...	29	4	30	5·0277195	106590
	Moogootagayray ...	102	17	"	4·8389109	690099
	Seedasweer	48	38	30		

TADIANDAMALE AND BRUMMAGERRAY—52361516 172247

	Tadiandamale ...	26	9	30	5.0271235	108443
115	Moogootagayray ...	122	23	"	4.9538543	89919.6
	Brummagerry ...	31	27	30		

NOORKULL AND SEEDASWEER—47758506 59683

	Noorkull ...	54	59	"	4.9182554	82842.9
116	Moogootagerry ...	45	10	"	4.8383820	68925.8
	Seeda:weer... ...	79	51	"		

TADIANDAMALE AND NOORKULL—49687117 93049

	Tadiandamale ...	19	36	24	4.9231907	84760
117	Muntapum... ...	95	30	16	4.4935467	31372.3
	Noorkull... ...	65	3	20		

BRUMMAGERRAY AND TADIANDAMALE—52361516 172247

	Brummagerry ...	25	19	"	5.2358728	197839
118	Muntapum... ...	60	21	48	4.9231015	84742.5
	Tadiandamale ...	94	12	12		

Table shewing the Distances of the several points from the Meridian of Babroyn, Droog and its Perpendicular.

Places Computed.	DISTANCES FROM BABROYN, DROOG ON THE			
	Meridian.	Perpendicular.		
Tadiandamale,	331826	8	69272	E
Tha'oor,	263598	"	45494	"
Baingoor,	263868	"	64019	"
Sayrungaul,	290790	"	41215	"
Payroor,	309416	"	57214	"
Veerajenderpett Tree,	334899	"	140623	"
Moog'utagayray,	351573	"	176617	"
Beerunnauny,	400161	"	148225	"
Brummagerry,	435166	"	207079	"
Seedasweer,	288083	"	200927	"
Noorkull,	274801	"	142668	"
Muddukayray,	259672	"	114298	"
Codergurrahully,	246299	"	168607	"
Bettadipoor,	245732	"	250084	"
Maullimby,	169870	"	174191	"
Koondhully,	171343	"	125605	"
Hurrugul,	187495	"	131493	"
Kalkundoor,	185250	"	152443	"
Soorlaby Peak,	194570	"	107736	"
Cotay Betta,	214445	"	121588	"
Soobramanuhni,	170437	"	96850	"
Moodapaudee,	211829	"	680813	"
Payrahjee,	240727	"	12753	"
Chokaudee,	181290	"	17274	"
Bullamale,	116722	"	116546	"
Bellanaad,	137096	"	98333	"
Goompay,	166502	"	139909	"
Niddoopooly,	182034	"	75208	"
Maddhow,	175154	"	44537	"
Kulbetta,	158756	"	16208	"
Uddoor,	218061	"	65385	"
Kunduddu Rumale,	268003	"	65829	"
Purrathuddy,	258104	"	22766	"

